# PARALLEL SESSIONS - ABSTRACTS

# Poster Session 1

**1**

**Identifying barriers to dissemination of mHealth in diabetes care by sharing multiple stakeholders views**

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Background: The implementation of new digital technologies, mainly apps, is recognised as a future support for monitoring and self-management of chronic diseases. In the case of diabetes, recent years have brought a multitude of apps already available or in development. However, there is generally a considerable gap between developers' expectations and the needs of the potential users, besides daily-life obstacles regarding a sustained use. Here, we propose that by matching the views of the diverse stakeholders involved we are able to identify barriers for adoption, and gather pragmatic clues on how to overcome them.

Methods: A diabetes patient association has organised in October 2016, together with a university and a municipality, a workshop that put in dialogue people with diabetes, informal carers, healthcare professionals, patient advocates, medical devices manufacturers, biomedical start-ups, software developers, academics, and regulatory bodies. The workday was divided into five thematic sessions, with a plenary focus. The sessions had two rapporteurs, and a general conclusion was discussed after the last session.

Findings: The dialogue was able to uncover major expectations and hurdles felt between stakeholders. Patients and informal carers were shown not only to feel a lack of guidance in choosing among all the available apps, but also to consider the language commonly used largely inadequate to their literacy level. It was also noted that people with type 2 diabetes do not value the use of apps, with the exception of those for physical activity.

Healthcare professionals worried with the burden of increased volume of data, have need for interfaces that process and provide simplified and actionable information. Developers argue that regulatory bodies should provide communication standards, to facilitate interoperability. All indicated the need to be able to feed a centralised hub of clinical information with data collected by the apps.

Discussion: The voice of patients is rarely heard in the design stages of digital technologies targeting the management of chronic disease. Here we show that, besides the benefit in including them earlier than just the implementation stage, also the expectations and needs of other stakeholders should be confronted, in a true mHealth co-creation process.

**2**
**Evaluation of patient education interventions**

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Background:  To provide an overview of how patient education interventions for people with long-term illness are evaluated, and insight into the results fros these evaluations, the research literature published between 2000 and 2017 was comprehensively reviewed.

Methods: We searched 8 literature databases. Full text articles meeting the inclusion criteria were retrieved and reviewed. Arksey and O'Malleys's framework for scoping studies guided the review process and thematic analysis was undertaken to synthesize extracted data.

Findings: Of the 10628 titles identified, 103 articles were included in this review. Participants of patient education interventions experienced the programs as beneficial according to less symptom distress and greater awareness of their own health, improved self-management strategies, peer support, learning and hope. 56 of these studies had evaluated health economic impact, and 46 of these studies concluded that the interventions were beneficial in terms of decreased hospitalization, visits to Emergency Departments or General Practitioners, quality-adjusted life years, and reduced loss of production.

Discussion: The results from this review shows that participation in patient education interventions have in different ways been experienced as beneficial, and that patient education interventions, regardless of study design and time horizon, are an effective tool to cut costs. The insight from this review can enable researchers, health care providers, and participants to understand the complexity in evaluating patient education interventions. Our contention is that healthcare providers and managers can use this information within a broad decision-making process, as guidance in discussions of care quality and how to provide appropriate, cost-effective patient education interventions for people with a long-term illness.

## 3
## Patient and clinical staff attitudes to discussions and documentation of DNR or Goals of Care

**Derek Eng, St John Of God Health Care**

Private health care providers are notorious for medical over-intervention. In our 578- bed private hospital in Western Australia we conducted research on patient and clinical staff attitudes to discussions and documentation of treatment limits in critical, life- threatening illness (eg resuscitation). Although research is lacking in private hospitals in Australia, we hypothesise that patients nearing the end of their lives wish to predetermine the extent to which they receive medical intervention. We used mix- methods research to explore attitudes towards medical treatment decisions during times of critical, life-threatening illness. This was done over two six-month blocks in 2016 and 2017. We looked at attitudes towards the traditional Do Not Resuscitate (DNR) form, and for changes in attitudes after the introduction of a Goals of Care (GOC) form. These documents communicate the content of discussions between clinical staff and patients. The Goals of Care form is similar to the Physician Order for Life Sustaining Treatment (POLST) in the USA and the Treatment Escalation Plan (TEP) and Universal Form of Treatment Options (UFTO) in the UK.

## 4
## Evaluation of a program for implementation of shared decision-making in cancer care – study protocol

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Background: Despite scientific evidence, effective implementation strategies, and a prominent position on the health policy agenda, shared decision-making (SDM) is not widely implemented in routine practice so far. Therefore, we developed a program for routine implementation of SDM in oncology, where SDM is especially important. In a pilot study based on the Consolidated Framework for Implementation Research (CFIR), we conducted an analysis of

current state and a needs assessment. Based on these results, the main aim of our current study is to evaluate the process and outcome of this theoretically and empirically grounded multicomponent implementation program designed to foster SDM in routine cancer care.

Methods: We use a stepped wedge design, a variant of the cluster randomized controlled trial. The intervention to be implemented is SDM. Three participating clinics of one comprehensive cancer center in Germany will be randomized, and receive the multicomponent SDM implementation program in a time-delayed sequence. The program consists of the following strategies: a) SDM training for health care professionals, b) individual coaching for physicians, c) patient activation strategy, d) provision of patient information material and decision aids, e) revision of the clinics' quality management documents, and f) critical reflection of current organization of multidisciplinary team meetings. We will conduct a mixed methods outcome and process evaluation. The outcome evaluation will consist of four measurement points. The primary outcome is adoption of SDM, measured by the 9-item Shared Decision Making Questionnaire. A range of other implementation outcomes will be assessed (i.e. acceptability, readiness for implementing change, appropriateness, penetration). The implementation process will be evaluated using stakeholder interviews and field notes. This will allow adapting interventions if necessary.

Expected findings and discussion: This study is the first large study on routine implementation of SDM conducted in German cancer care. We expect to foster implementation of SDM at the enrolled clinics. Insights gained from this study, using a theoretically and empirically grounded approach, can inform other SDM implementation studies and health policy developments, both nationally and internationally.

## 5
## Characteristics and determinants of patient-centered care from organizations' perspectives

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Background: Health and social care systems, organizations, and providers are under pressure to organize care around patients' needs with constrained resources. To overcome constrained resources and to successfully implement patient-centered care (PCC), barriers must be addressed at all levels of care. Up to now, there has been a lack of comprehensive investigations and concepts on which barriers and facilitators are relevant for patient-centered care. Our study examines the current understanding and determinants of patient-centered care from decision maker´s perspectives in health and social care organizations (HSCO) in a model region in Germany.

Methods: Semi-structured face-to-face interviews were conducted with clinical and managerial decision makers (n=22) from multiple health and social care organizations (HSCO) in the model region Cologne. Participants were recruited via existing contacts to practice partners, cold calling, and snowballing based on a maximum variation sampling strategy varying by health and social care organization types. The qualitative interviews were recorded, transcribed verbatim, and analyzed according to qualitative content analysis approach using MAXQDA. The Consolidated Framework for Implementation Research (CFIR) was used to conceptualize domains of determinants.

Findings: The findings indicate that decision makers have a specific and fairly consistent understanding of the concepts of patient-centered care. They also identified similar determinants, which facilitate or hinder the implementation of PCC in their contexts. They expressed scarcities of different resources and different strategies to deal with those scarcities. Several characteristics of the HSCO´s inner setting (e.g., communication among staff, employee welfare, and continuity of care) were identified as key determinants to overcome constrained financial, personnel, and material resources in order to deliver patient-centered care.

Discussion: The results will help to foster the implementation of patient-centered care in HSCOs. They provide information on decision maker´s understanding, facilitators and barriers of patient-centered care in multiple HSCO contexts. We identified possible starting points for initiating the redesign of health and social care towards more

patient-centeredness. Improving the communicative skills of health and social care providers in consultation with patients and building a culture of communication within the HSCO have proved to be important starting points.

## 6
## The use of reflective practice in residents to consolidate communication skills

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Background: An effective training in communication skills requires the integration of multiple strategies within classroom and clinical milieus across diverse setting. The reflective practice includes the critical analysis of everyday communication practices to enhance skills and promote professional development. This study aimed to evaluate how residents integrated the communication skills taught in a course for the actual clinical context.

Methods: A group of 40 residents participated in a communication skills training. The training focused on particular clinical scenarios, including breaking bad news, communicating with difficult patients, discussing do-not-resuscitate orders, discussing life-and-death decisions with families of critically ill patients. After the course, the residents wrote a reflective report on four challenging communication situations they faced in clinical practice and how they dealt with such situations. These reports were subjected to a content analysis.

Findings: The most mentioned challenging communication situations in the reports were breaking bad news, the difficult/aggressive patients, and the patient in denial of clinical condition and treatment. The three greatest difficulties in dealing with patients were to establish a relationship, not react to the aggressive behavior of the patient/family, and deal with patients who expressed intense emotions (e.g., crying). The most commonly used communication strategies were the spikes protocol, facilitating and validating the emotions, understanding the patient's perspective.

Discussion: The results suggest that residents transferred the communication skills taught in the course to clinical practice, including their availability to attendance psychosocial aspects, better preparation for breaking bad news and better ability to respond empathically to the patient's emotional cues and concerns.

## 7
## Individualized audit and feedback communication to improve professional practice

**Kimberly Carter, Carilion Clinic**
**Rebecca Clark, Carilion Clinic**

Vaccines are noted to be among the most successful health advances in history, but adult immunization rates in the United States are well below recommended levels. The literature indicates the need for effective strategies to immunize at-risk groups.  Centers for Disease Control and Prevention estimates only 20% of the at-risk population ages 19 to 64 and 61% of those greater than age 65 have been immunized.  Studies have demonstrated that recommendations from providers have a major influence on immunization behaviors of patients, yet providers are often hesitant to encourage vaccinations.  Individualized communication to providers that includes audit and feedback (A&F) about behaviors can have a major impact on changing behaviors and improving immunization rates.

This study explored the impact of A&F communication on individual performance and pneumococcal immunizations.  Electronic medical records provided data regarding **providers'** practice regarding immunization.

In phase 1, the manager met with each provider and shared information regarding personal performance for the previous year. In Phase 2, the manager sent each provider a personal email with A&F about performance for the previous month.

Data were collected for nine months. The mean immunization rate (41.68%) from the preceding fiscal year served as the control.

Phase 1: For three months following A&F, the mean departmental immunization rate was 32% (range: 27% to 32%). This was not statistically significant $X^2$ (1, N=614) =1.74, p=1.86 when compared with the control.

Phase 2: During this six-month period, the mean departmental immunization rate rose to 56.8% (range 45% to 67%), demonstrating that individual, timely A&F was significant $X^2$ (1, N=1379) =4.50, p=0.033.

These findings support that timely, individualized A&F is actionable and can have a positive impact on provider behavior. Generalized feedback without data about current performance did not have a similar impact.

Timely, actionable communication with individuals can have a significant impact on practice. Electronic records provide accurate data regarding performance and this can be communicated with providers. It is essential for providers to have actionable information about their behavior if they are to improve and these findings can be used in a variety of settings to impact performance.

**8**

**Patients with mild to moderate allergies: What triggers self-directed learning on the internet? A focus group study**

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Background:  Mild to moderate atopic allergies are precursors of bronchial asthma. Self-management for mild or moderate allergies is an important strategy to prevent asthma. Self-directed web-based allergy-specific information might help to promote self-awareness and self-management in lay people. When and how people with a chronic mild condition start to look for information and learning opportunities outside formal medical encounters is not well understood but essential in the development of a sound webbased education and support tool for this target group. This study aims at identifying triggers to selfdirected learning in patients with mild to moderate allergic diseases as well as their requirements on such digital services.

Methods:  33 allergy patients (20 female), between 20 and 81 years of age, took part in one of four focus groups in four different German cities. Moderated group discussions were recorded and transcribed verbatim. Applying content analytic techniques in MAXQDA, a multi-professional evaluation group identified a coding system. Content analysis was performed by two independent researchers and considered reliable.

Findings:  Respondents start to seek information if they feel a need for action. We identified internal and external triggers. Internal triggers are either situation-specific (acute symptoms, problems, deterioration) or more general (searching for treatment options, acquiring knowledge about disease, improving selfmanagement). External triggers are (a) the beginning of the allergy season regardless of symptoms, (b) the social environment (i.e. suggestions from friends on new findings) and (c) contact with the medical system Participants like webpages to offer both, general and in-depth information, and require individualized information and action strategies (i.e. transfer knowledge into everyday practice). They appreciate digital learning environments responsive to their individual needs rather than fixed linear curricula. A variety of methods (texts, illustrations, videos etc.) and interactive elements are considered necessary.

Discussion:  To attract attention a self-directed web-based tool to enhance self-management of mild to moderate allergies should focus on symptoms and patient's need for action. Interactive elements as well as individualized learning paths seem to be necessary to initiate self-directed learning and the health literacy capacity building. It is challenging to fulfill user's demands regarding utility, usability and individualization.

**9**
**Knowledge professionals need, when they need it: Presenting an online learning platform about rare disorders – Sjelden.no**

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Background:  The Norwegian Advisory Unit on Rare Disorders (NKSD) established an open online academy in 2017 - Sjelden.no.

Research and experience shows that when professionals lack knowledge, it makes living with a rare disorder more challenging. Therefore, the objective of Sjelden.no is to efficiently increase knowledge about rare disorders amongst professionals by providing easy access, high-quality, and relevant information.  Sjelden.no's target group is professionals working with people with rare disorders and their families. This includes professionals working in all sectors (e.g., government/private, health, school, kindergarden)

Methods:  Sjelden.no offers a variety of different digital learning resources such as e-learning courses, videos, podcasts, and online lectures. In collaboration with a Norwegian University, Sjelden.no is developing a 10 ECTS course on rare diseases. The first students will enroll in the autumn of 2019. The resources are developed and quality assured by the leading experts on rare disorders in Norway. Due to most professionals' busy schedules, Sjelden.no is striving to maximize the learning outcome in a time efficient manner. Sjelden.no does this by incorporating learning methods that have been documented to give the best learning outcome.

Findings:  So far in the project, feedback from users has mainly been positive. Direct quotes from users will be presented, including health professionals and parents. Examples include: "I now have a much deeper understanding and feel more prepared for difficult situations that can arise" - Health professional. Example 2: "As parents of a child with Neurofibromatosis, we are grateful that you have made an elearning course about the diagnosis targeting school professionals. Our dialogue with the school is now much better and more productive. The school professionals have an increased and up-to-date knowledge about the diagnosis and various challenges our child faces" – Father

Discussion:  We will share our experiences developing Sjelden.no hoping it will be an inspiration for other specialist centers for rare disorders. Overcoming challenges, including identifying the target group and how to reach them, will be presented. Overall strengths and limitations spreading knowledge about rare disorders will be discussed.

## 10
## E-Learning Intervention for Managing Parkinson's Disease Medication

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Pharmacological management of Parkinson's disease is challenging for patients to understand. It involves using multiple medications given at different doses, multiple times per day, and in various combinations. We investigated the feasibility of administering a tablet-based interactive module on Parkinson's medication safety to patients attending their regularly scheduled clinic visit at a specialist Movement Disorders clinic. If patients arrived 30 minutes or earlier to their scheduled clinical visits, they were offered this module. Upon signing consent, subjects completed a pre-intervention test on the tablet, watched a video explaining the medication principles, and then completed a post-intervention test, while waiting for their appointment. Investigators assessed understanding of the material provided using these quizzes. Investigators also assessed likeability of the mobile tablet by asking six additional questions in a post-test survey. Descriptive analyses on the variables in the data set assessed age, cognitive scores, length of time taken to complete the e-learning intervention. Fifty participants enrolled in the study. Overall, participants improved on mean test scores by 81% after completing the educational intervention. Age was associated with a longer time to complete the module (p=0.007). Also, patients with a lower Hoehn and Yahr score (less severe Parkinson's disease) were more likely to agree to using the tablet again in their clinic visit as a means of learning about their disease.  The age of participants using the mobile device ranged from 45-95 but was not a significant factor in ease of use or patient satisfaction with the module. For every increase in age there was 0.39 correlation that the module took longer to complete, but participants were able to improve their scores.  The long-term goal of this study was to develop multimedia teaching strategies to enhance patient and care partner knowledge of Parkinson's Disease medications, with the aim of improving care. As busy health care providers have

limited time to spend with patients, e-learning technology can be utilized to help enhance understanding of complex medical treatments.

## 11
## Collaboration and Communication: Nursing Simulation Utilizing Tele-presence Robots

**Kathleen Huun, Indiana State University**
**Andreas Kummerow, Indiana State University**

Background: As is known, simulation allows nursing students to engage with complex patients to learn and enhance their critical thinking skills within a safe, do no harm environment. Collaborative simulations can also promote communication skills between care providers. Thus, live simulation opportunities should be provided to distance students for these very reasons.

This perceived need/opportunity gave rise to developing a multi-patient simulation for campus-based traditional nursing students and distance LPN-BSN students. A fleet of tele-presence robots were utilized to bring distance students to this point of learning, the simulation lab. The objective was to provide a quality, collaborative simulation experience for all nursing students with distance students participating via tele-presence robots. As such, collaboration and communication were key to a successful learning experience.

Methods: In preparation for simulation, all LPN-BSN students watched a brief video about operating the tele-presence robot. This was followed by a practice session engaging and driving the robots. On simulation day, distance students logged onto their robot 30 minutes early to troubleshoot any issues and to pair with a campus buddy. Simulations lasted 50 minutes and students were required to complete a full patient assessment. Many standardized patients were used which further enhanced communication opportunities.

Findings: An entire class of online students accessed robots (four per simulation) and actively participated in patient simulation in collaboration with a face-to-face student. The virtual students felt an endocentric presence and indicated self-confidence and satisfaction in learning. The distance students also completed a patient profile/assessment via buddy collaboration and communication with the patient. Faculty managed the logistics of scheduling despite multiple time zones, arranged student collaboration (buddy system), and provided driving sessions in preparation for simulation.

Discussion: Utilization of tele-presence robots is an evolving means of distance communication with other healthcare providers and patients. In simulations, use of tele-presence robots promotes and enhances communication (with patient and campus buddy) as the user/driver has no tactile abilities. The more this technology is utilized and studied, there is opportunity to expand on its potential and use in healthcare education and communication.

## 12
## Evaluation of a web based tool helping prostate cancer patients become active partners in their care. A pilot study

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Background: Barriers to effective communication in cancer care have been identified at initial oncology consultations. Let's Discuss Health (LDH) is a website designed to help patients become active partners in their care. The objectives of this pilot are to assess; 1) the feasibility of referring patients to LDH before initial radiation oncology consultations; 2) the impact of its use on radiation oncologists (RO)-patient communication.

Methods:  Design: observational and comparative study.  Participants: 5 RO and 30 prostate cancer patients. Patients were recruited successively into two distinct groups:  1) group 1 received care as usual; 2) group 2 was invited to prepare their consultation with LDH. Instruments: consultations were audio recorded and analysed using MEDICODE (instrument to analyse verbal exchanges on treatments in terms of themes, dialogue and initiative), RO and patient questionnaires, and patient focus groups. Outcomes: perception of the LDH's usefulness and its impact on RO-patient communication.

Findings:  Demographic characteristics were fairly similar in both groups. However, the rate of participation was higher for group 1 (68% versus 54%). Group 2 reported a favorable evaluation of the website: easy of navigation (86%), readability (77%) and suitability of links to others cancer resources (75%). The RO reported that Group 2 patients were better prepared (61%) and better informed about prostate cancer (64%). In terms of content discussed, the average number of themes discussed was similar in both groups (p>.05), however the pattern differed between groups for discussions of "treatment adverse effects" (Group 2: 2.33 vs Group 1: 1.86). Participation indicators were on average similar in both groups (p> 0.05) but certain themes presented with clinically significant differences in terms of dialogue: "Treatment main effect" (Group 2: 23% vs Group 1: 12,6%) and "Treatment-related attitudes and emotions" (Group 2: 52% vs Group 21: 42.5%).

Discussion:  This study confirmed the acceptability for prostate cancer patients to be referred to a website before their consultation with the RO. Using LDH before seeing the specialist enabled the patient's voice to be heard on themes recognized as important for them. Results will inform the conceptualization of a pragmatic randomized controlled trial with this cancer population.

## 13
## Theraphy 2.0: e-health in therapy and counselling

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Information and Communication Technologies (ICTs) have gained increased relevance when used in counselling and therapy. The differences in communication behavior of the younger generation, known as "digital natives", may lead to a decrease of success of the traditional approach of therapeutic processes. This generation is using the Web 2.0 communication tools (e.g., Facebook and Whatsapp) as an extension or complement to their oral communication, in a daily basis, which highlights the importance of ICT-based activities in therapeutic processes, between the expert and the client. The Therapy 2.0 - Counseling and Therapeutic Interactions with Digital Natives, funded by the ERASMUS + program, seeks to integrate ICT into counselling and therapy, especially for the younger generation and refugees.

This study aims to explore the use of ICTs in the therapeutic and counselling processes and improve quality of the products available to this endeavour. 10 institutions from 7 different countries (Germany, Slovenia, Croatia, Iceland, Austria, Portugal, Greece), with professionals who conducted therapy or counselling, evaluated the products developed by the Therapy 2.0, such as the guidelines; toolbox; e-platform, mobile applications. Through the analysis of their answers to an on-line questionnaire, we found that these products enables social, pedagogic and psychologic counsellors, advisers and therapists to transfer their face-to-face skills to the online environment, and to deliver counselling or therapy services via technology, identifying its potentialities. They also allow to discuss how to approach the professionals and specially the sociocultural levels of "digital natives", refugees and other target groups and how to support them in the implementation of the results of the therapy / counselling process.

Considering these results, it is important to think over the importance of using ICT-based tools for communicating in therapy and counselling services, as well as implications for clinical practice, considering the critical analysis of the specialists enrolled in the development and evaluation of these products.

## 14
## Use of institutional social media for communication in healthcare in a National Health System.

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Background: Infomed is the Cuban National Health System network that coordinates all the health institutions of the country in terms of communication and information management. One of its goal is that social media became channels for health communication for the entire country. Each health institution in the country is expected to develop a social media strategy that relates to its particular purpose, as well as to the goals of the Cuban national health system.

This research aims to characterize the use of social media in the Cuban National Health System for communication in healthcare.

Methods: A descriptive study was conducted, including all the social media profiles of Cuban health institutions, from January/2017 to December/2017. The variables used were: presence on Facebook and/or Twitter, update frequency, type of resources, topics, Facebook ranking according to LikeAlyzer, Twitter impact according to Twitonomy.

Findings: Seventy-five profiles were studied. There has been an annual increment of more than 1000 Facebook followers and about 500 in Twitter since their beginning, in 2014. Infomed's profile ranking in Facebook is 75/100 and 48 out of 100 tweets are redistributed, indicating a high level of impact.

However, most institutions have presence only on Facebook (69%); only 25% have also a Twitter account; 64% of them maintain a systematic update (at least twice a week). The most used types of resources were articles and pictures. The main topics covered include hypertension, cancer, obesity, diabetes, Zika, dementia, aging, pregnancy and HIV/AIDS. 53% of Facebook profiles obtained a ranking lower than the average value for any type of page (53/100). On average, 28 out of 100 tweets are redistributed.

Discussion: Social media are an important form of digital communication. Simple qualitative methods were used that showed increased social media use, but suboptimal use of Facebook profiles and insufficient use of Twitter within the Cuban National Health Service Network. Additional research is needed to further characterize the social media strategies of our health institutions and evaluate their results. Such information can be used to design interventions that improve use within a health system.

## 15
## Slinging goop: What attitudes about health is Gwyneth Paltrow encouraging with her lifestyle brand?

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**Amanda Bradshaw, University Of Florida**
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Background: Goop, Gwyneth Paltrow's lifestyle website, includes a section that publishes health advice, often expressing alarming perspectives about effectiveness of conventional medicine and drawing attention to experimental treatments. According to parasocial interaction theory, individuals will adopt the values and attitudes of public figures in order to maintain a perceived relationship with them, often demonstrating how celebrities can influence health behavior.

Method: The researchers conducted a thematic analysis of all 265 articles published under goop's "Health" section up to the date of data collection, 9/17/2017. Six researchers, trained in qualitative analysis, examined 15% of the articles in the sample together to establish intercoder agreement. Axial coding, or relating themes and concepts, was used after researchers analyzed the remaining articles.

Findings: Five themes emerged from this analysis: fear, clean products, alternative treatments, connections, and the role of women. Fear referred to the use of disease-mongering, jargon, and overselling of medical conditions to emphasize a need for the product or treatment advertised in the article. Clean exemplified the authors' affinity for toxin-free products or methods that would allow the users to "detox" from potential dangers they were exposed to through daily living. Alternative treatments highlighted unconventional healing products and therapies, with goop's authors portraying themselves as experimenters. Connections referred to goop's emphasis on the interconnected systems throughout the body, as well as the importance of staying connected to nature. The role of women described how goop's authors often discussed how its products could help its readers achieve a specific brand of aspirational femininity and motherhood, exemplified by Gwyneth Paltrow herself.

Discussion: Goop's health content could be aptly described as vehicles to sell goop products or advertise the services of the article's affiliated expert. Fifty-five percent of the articles included a link to a product sold by goop, under the guise of empowering readers to take control of their own health. The direct link between goops' editorial and sales as prompted the consumer advocacy group Truth in Advertising to cite goop over 50 times for unsubstantiated claims. Further studies are necessary to explore the true impact these messages are having on readers.

## 16
## Physicians and digital media – differences between personal and patient-physician utilization as a communication tool

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Background: The suggestion to use digital media to facilitate patient-physician communication has been reported in several studies and in an increasingly consistent way during the last years. Pitfalls and benefits are in discussion but little research is being conducted concerning physician's perspectives and practices regarding the use of digital media. This study aims to better understand the utilization of digital resources by Family Physicians (FP) and psychiatrists (PSY) in their personal life and to assess their experience in using these tools to communicate with their patients.

Methods: We used a convenience sample of 143 physicians (94 PCP and 49 PSY). An original questionnaire was built to assess socio-demographic and professional characteristics, digital literacy (access to digital media, use of digital media) and to evaluate perspectives on the use of digital media in patient- physician communication. A Likert scale ranging from "never" to "everyday" was used. Statistical analysis was performed using IBM® SPSS® Statistics v2.2. Descriptive statistics were used, and correlational analysis were performed with the Pearson Correlation Test.

Findings: Physicians were predominantly (75.8%) female with a mean age of 37.3 (SD12.4) and 10.6 years (SD12.24) of clinical practice. Top of FormPhysicians report using mobile phone calls, SMS and e-mail very often (every day scores in 72.5%, 75.8% and 85.9%, respectively), but not to contact patients. Age and clinical experience correlate positively with SMS and e-mail exchange with patients (p<0.01), and negatively with the query of blogs/social networks and use of health and wellness applications ($\rho$=-0.33, $\rho$=-0.26, $\rho$=-0.18, p=0.02 and $\rho$=-0.18; p<0.01). Clinicians consider that there is little benefit in the use of social networks for medical-patient communication privileging the contact by e-mail or phone call.

Discussion: Physicians in our sample are frequent users of digital resources but digital media are not globally used to contact patients. Top of FormE-mail and SMS based-solutions appear to be the most interesting Top of Formcommunication strategies to better help and support patients. It's important to deepen knowledge on the use of these strategies namely in improving patient-physician communication.

## 17
## Patient coaching: who needs a coach, according to healthcare professionals?

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Background: Research has shown that patients with a chronic disease who perceive communication barriers in consultation with a medical specialist would like support by a patient coach to help prepare, attend and evaluate this consultation. The aim of the present qualitative study is to investigate the opinion of healthcare professionals on support by a patient coach.

Methods: We performed individual in-depth interviews with physicians and nurses. The semi-structured interviews focused on three questions: 1) which patients could benefit from support in communicating with a medical

specialist, 2) what should such support comprise of, and 3) who might give such support. Interviews were recorded and transcribed verbatim. Data were analyzed using Quagol.

Preliminary findings: Eighteen interviews were conducted, ten with physicians (six medical specialists, four general practitioners) and eight with nurses (four community nurses, three nurse practitioners and one physician assistant). Mean age was 46 (range 29-62) years, experience on the current job between 6 months and 40 years, five were men. Interviewees recognized that coaching would be helpful for some patients. Patients who might need a coach were initially described as being older, with a small or no personal network, difficulty comprehending the information, or cognitively impaired patients , e.g. suffering from dementia. As the interview progressed, however, interviewees increasingly expressed the view that all patients who were temporarily cognitively impaired might need a coach to support them during consultations.

**In the interviewees' opinion, coaching should contain** elements of psychosocial support (e.g. managing expectations), informational support (e.g., clarifying medical information) and practical support (e.g. navigating through the health care system and hospital). The interviewed nurses also described a need for a more general kind of support, to encourage self-management at home. Interviewees agreed that coaches should be specifically trained for the job and might need basic medical knowledge.

Discussion: The interviewed health care professionals agreed that patient coaching may be needed by patients, particularly when they are cognitively impaired. This does not correspond to literature data on the need for patient coaching as expressed by patients themselves.


**18**

**The Influence of a Question Prompt List on Patient-Oncologist Information Exchange in an Underserved US Patient Population**

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Background: Question prompt lists (QPL) have been shown to increase patient active participation (AP) in several medical contexts, but questions remain about whether QPLs also improve patient-physician information exchange, especially in underserved populations. In our prior research with African-American patients, we demonstrated that receiving a QPL as a brochure increased patient AP during oncology interactions. In this analysis, we investigated the extent to which the QPL influenced information exchange.

Methods: Data were from a larger study testing the effectiveness of a 43-question QPL on patient AP in a sample of African Americans with cancer (n=99) in Detroit, Michigan, USA. Patients were randomized to Usual Care (n=36), QPL-only (n=34), or QPL+Coach (n=29) prior to their first interaction with an oncologist (n=17). Interactions were video recorded and analyzed to identify patient questions, assertions, and statements of concern directed at oncologists. For this secondary analysis, trained observers identified the number of QPL-related topics that oncologists addressed during the interactions, and whether they initiated the topic or addressed it in response to patient AP statements. GEE analyses were used to assess the effects of study arm on (1) total information provided **by oncologists and (2) proportion of total information provided in response to patients' AP statements.**

Results: There was no significant effect of study arm on the total number of QPL-related topics oncologists addressed. However, we found a significant main effect of study arm on the proportion of total QPL-related topics addressed in response to patient AP statements (Wald chi-square=8.46, p=.015). Compared to oncologists of patients in the Usual Care arm, a higher proportion of total QPL-related topics were addressed in response to patient AP statements by oncologists of patients in the QPL-only group (p=.008), and there was a marginal effect for oncologists of patients in the QPL+Coach group (p=.06).

Discussion: Although the QPL did not increase the total number of QPL-related topics oncologists addressed, it increased the extent to which the information exchange was interactive rather than one-way. Future research should examine whether a QPL and, in turn, the use of interactive information exchange, improves patient comprehension, satisfaction with information, or other outcomes.

**20**
**Resident physicians' knowledge of health literacy and clear communication**

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Background: With the growing concern about the limited health literacy of patients, it has been recommended that health professionals be given better training on health literacy issues to improve communication in healthcare. However, few studies have explored health literacy issue in healthcare professional education in Japanese context. This study explored resident physicians' knowledge of health literacy and its relationship with their clear communication practices.

Methods: The participants were 134 junior resident physicians at a university hospital in Tokyo. Their knowledge of health literacy and clear communication practices were assessed through a self-reported questionnaire, completed at the end of the first year of their residency program.

Findings: Of the participants, 37% had never heard of the concept of health literacy. Among the skills for clear communication, general communication skills, such as "greet patients warmly" and "make appropriate eye contact," were routinely practiced by majority of the participants, while more specific skills for patient education were not practiced widely, such as "limit the amount of information provided" and "use the teach-back technique". Those with better knowledge of health literacy practiced these communication skills more routinely.

Discussion: The concept of health literacy was not widely recognized by the resident physicians, and their communication skills required improvement. Our study suggested that knowledge of health literacy might be related to better communication practices. Physicians' understanding of health literacy issues might improve their ability to communicate clearly. For effective patient–physician communication and patient-centered care, it might be necessary to incorporate health literacy in communication skills training. Limited health literacy is becoming a public health issue in Asia, including Japan, and has not been addressed sufficiently by medical education in Japan. Further research must identify ideal educational strategies for teaching health professionals about health literacy.

**21**
**An examination of how easy read material is used to enable access to information about mental health**

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Background: Everyone has the right to information about health and health services that they can understand. People with intellectual disability and their families report that accessible information about health is not readily available. This is significant as people with intellectual disability often experience poorer health outcomes than the broader community. Easy read is a form of text based accessible information designed for people with intellectual disability. The literature reveals that little is known about how it is used in health settings. This study explored the question: How is easy read material used to enable access to information about mental health?

Method: Semi-structured qualitative interviews and observation were used to collect data across four sites. The interviews explored the experiences of people with intellectual disability, their carers and service providers with a focus on how health information was accessed and how easy read was used. An integrated health literacy framework was applied to guide enquiry and analyse data about the activities of accessing, understanding, appraising and applying information.

Findings: Specialist disability services and people with intellectual disability who have developed and used easy read material reported that they found it useful to facilitate various aspects of communication. However, easy read information about mental health was not found to be widely available. Some health practitioners used pictures, diagrams or technology to make health messages more accessible and most relied on verbal exchange and carer involvement to support communication. All sites included in the study reported that greater access to easy read material to understand health information would be beneficial.

Discussion: Easy read material was not widely used to communicate about mental health information at the study sites. Participants conveyed that simplified text information, such as easy read, could be of value to various service user groups not only people with intellectual disability. The role that easy read could play in enabling access to information in a health setting remains difficult to assess due to its limited use. Greater availability of easy read material could complement the visual and verbal strategies currently employed by health practitioners to enable access to information.

## 22
## An assessment of physician HPV health literacy and vaccine recommendation practices

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Background: Although vaccination against cancer is monumental, uptake of the HPV vaccine in the US is low. In 2016, 60% of teens received >1-dose of HPV vaccine and only 43% had completed the vaccination series. Healthcare provider recommendation is the single best predictor of adolescent HPV vaccination. However, studies have found that providers are not consistently recommending the vaccine. Lack of recommendation by providers could be related to their understanding of HPV and the vaccine. The purpose of study was to assess HPV health literacy and HPV vaccination recommendation practices of physicians in North Carolina (NC).

Methods: This survey is part of a larger study evaluating the feasibility of an enhanced training curricula for medical students to increase HPV health literacy, self-efficacy, and intention to recommend and provide the HPV vaccination to patients. This survey included the following constructs: HPV-related health education practices, HPV health literacy, attitudes about HPV and HPV vaccine, societal norms of HPV prevention, and HPV vaccination practices. A paper survey was mailed to a random sample of all licensed and active pediatric and family medicine physicians in NC. We employed an abbreviated Dillman method and sent 3 mailings: 1) a prenotice, 2) a survey packet with self-addressed and stamped return envelope, and 3) a reminder post card.

Findings: Preliminary results indicate that physicians were significantly more likely ($p<0.0001$) to recommend HPV vaccines to 9-11-year-old girls as compared to boys the same age. In terms of provider communication, just under half (45%) reported being uncomfortable discussing sexually transmitted infections (STIs) with adolescents. Those who reported being comfortable in talking with adolescents about STIs were 3.9 times (CI: 1.029-14.996) more likely to recommend the vaccine to boys 9-11 years old as compared to physicians who reported less comfort ($p<0.05$). No significant differences were found between comfort level and vaccine recommendation for girls 9-11 years old, other age groups, or genders. Final data analysis will be presented at the conference.

Discussion: Upon completing this research, we expect to provide important state-level data regarding HPV-related health literacy and practices of medical health providers (i.e. pediatrics and family medicine) in NC.

## 23
## The JCI-Accredited Hospitals' Web Sites as a Health Communication Tool: The Case of Turkey

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Background: It's known that many patients in developed countries try to find a healthcare facility in middle- and low-income countries for dealing with their different health problems in a cost-effective way. Thus, the Internet is a common source for gathering information about hospitals around the world.

On the other hand the proliferation of the medical tourism is a triggering factor for accreditation systems. Joint Commission International (JCI) is one of these accreditation programs and gave its "Gold Seal of Approval®" to many facilities over 100 countries.

As a communication tool, web sites of these accredited healthcare facilities are important information sources. In this study, it is aimed to analyze the content of JCI-accredited hospitals' web sites in terms of communication and ethical values.

Methods: The data were collected in 8-18 February 2016 and in 1-18 January 2018. There were 18 criteria including contact information, availability of patient right pages, information for international patients etc. in the data collection form, which was developed by the authors according to the literature. Descriptive statistics were used to analyze the data by IBM SPSS Statistics ver23.

Findings: In Turkey, there are 44 and 42 JCI-accredited healthcare facilities in February 2016 and in 2018 January respectively. Besides 43 and 40 of these accredited facilities have websites in 2016 and 2018 respectively. 19 (44,2%) and 26 (65%) of the web sites include information about the patient rights. Information for international patients are included in 23 (54,8%) and 31 (77,5%) of the web sites in 2016 and 2018 respectively.

Discussion: The rising costs of the medical treatments direct patients to affordable and qualified treatment choices in developed countries. In this context, accreditation programs give valuable options to those patients about qualified facilities for other countries. Turkey is one of these options.

Although we observed some improvement in patient focused information, it is expected that ethical values, patient rights and communication-related information should be available for all these accredited web sites. It's necessary that healthcare facilities should adopt this information and give importance to their web sites in order to show how they value their patients.

## 24
## Conversation Analysis on the Interaction between Standardized Patients, Pharmacy and Pharmacy Technician Students

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Background: Pharmacy and pharmacy technician students should improve themselves during their professional education for solving communication-based interactional problems and enhancing the quality of healthcare services. Educational methods like simulation using standardized patients are appropriate for this purpose.

In this study, our aim was to observe the interaction between pharmacy students, pharmacy technician students and standardized patients in a simulation setting and evaluate it totally with evidence based conversation analysis.

Methods: Twenty-seven pharmacy and 51 pharmacy technician students volunteered to participate in the study. At the beginning, theoretical knowledge about interprofessional relationships, communication skills, professional duties and responsibilities were delivered to the students. Then, simulation practices were conducted with 3 different standardized patients in 4 different scenarios in December 2016. Conversation Analysis was used to describe the interaction in the pharmacy at the final phase of the study. The data consisting of 5 hour-video-recorded interactions were transcribed using Jefferson (2004) transcription conventions and analysed using Transana software. The ethical approval was obtained from the Hacettepe University Ethics Board.

Findings: Our conversation analytic findings showed that before pharmacy student gave information about drugs to the patient; they made a request for clarification regarding the patient's disease, and the pharmacy student made an account after giving the drug.

The pharmacy technician student gave drugs to the patient after the pharmacy student checked; both of the student met the first patient at the same time, the second patient was only met by pharmacy technician student, and saw last patient off at the same time.

Discussion: It's known that the interaction between the pharmacist and pharmacy technician has a significant importance in the qualified pharmacy services. In this study, it's revealed that students achieved the ability of using their theoretical knowledge and they could improve their interprofessional communication with simulation training.

On the other hand, it's concluded that conversation analysis methodology was proved to be very useful for revealing the importance of the simulation-based interprofessional education in pharmacy communication training.

## 25

**Higher empathy relates to the highest levels of happiness in medical students: a cluster analyze study**

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Background: Empathy has been related to medical students' psychological adjustment and future clinical competence. While the study of empathy in medical education has been extensive, most studies rely on global scores, disregarding variations in its facets. Based on a person-centered approach to data, the present study aimed to identify empathy profiles in medical students and assess whether these profiles are related to psychological distress and well-being.

Methods: The sample included 410 medical students in the first (46%) and third year (54%). An observational cross-section methodology was used, and data collection relied on self-reports of empathy using Interpersonal Reactivity Index – IRI (i.e., perspective taking, fantasy, empathic concern, and personal distress), stress (Perceived Stress Scale-PSS), depression, anxiety, and happiness (Hospital Anxiety and Depression Scale – HADS and Oxford Happiness Questionnaire – OHQ). Cluster analysis was used to identify and classify patterns of empathy. The study investigated gender and year effects in cluster membership, and differences between clusters in psychological distress and well-being.

Findings: Four clusters of student's empathy were identified: 1) a low fantasy and empathic concern cluster, 2) a low distress and high perspective taking and empathic concern cluster, 3) a low perspective taking cluster, and 4) a high distress and high empathic concern cluster. Students in the low distress, high perspective taking, and high empathic concern cluster presented the lowest perceived stress, anxiety, and depression scores, as well as the highest happiness results. Students identified in a cluster of high distress and low empathic concern presented the highest scores of perceived stress and anxiety, and lowest in happiness. Males were more frequent in the first and third clusters, and females were more frequent in the second and fourth clusters. Year 3 students were more frequent in cluster 3 and year 1 students in the remaining clusters.

Discussion: The findings suggest that there are configurations of empathy that put students at risk of psychological distress, while others are associated with better adjustment levels. Empathy, at the center of future physician's quality and ability to care, has implications for counseling and academic advising to promote medical students' psychological adjustment.

**27**
**Has a new core set of patient experience questions left out those with communication difficulty?**

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Background: Hospital patients who have difficulty communicating with healthcare providers are at greater risk of preventable adverse events and experience poorer quality of care in hospital. Therefore accurate measurement of their patient experience should be a priority. The Australian Commission on Safety and Quality in Healthcare have recently developed a core set of questions to measure patient experience. This core set was developed from a review of the qualitative research on patient experience in Australia and a series of focus groups. The objective of this current research was to critically examine the studies included in the review of qualitative research on patient experience, to determine if the perspectives of patients with difficulty communicating were included.

Methods: We critically appraised the 39 qualitative studies included in the review. We extracted data from each study on the following methodological parameters:

1. Population focus
2. Eligibility criteria
3. Recruitment process

4. Consent process

5. Data Collection process

6. Communication supports

On the basis of this analysis we determined whether patients with communication difficulty were included in the qualitative research on patient experience included in the review.

Findings:  A total of 11/39 studies focussed on populations that included or were likely to have included patients with communication difficulty. However, three of these studies excluded participants with communication difficulty and a further four studies did not report providing any communication supports to enable patients with communication difficulty to participate. The four remaining studies included two studies on the patient experience of those from a communicatively or linguistically different background, one on the patient experience of children with developing communication abilities, and one on the patient experience of people who'd had a traumatic brain injury.

Discussion:  It is unlikely that what is important to patients who have communication difficulty have been adequately captured in the new core set of patient experience questions for Australian hospitals. The practice and reporting of patient experience research needs to improve so that what matters to patients with communication difficulty is included in measures of patient experience.


## 29
## The importance of creating a bond between the doctor and the patient

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The education system of young doctors in Poland focuses mainly on gaining knowledge and developing technical competence. At the same time, the development of the ability to build a proper, deep relationship between the doctor and the patient is largely ignored. In the everyday realities of work, doctors only have the skills they have acquired because of their upbringing or everyday social interaction. These skills seem to be insufficient for confronting the problems of patients entrusted to their care.

 Creating a relationship, aside from the biological dimension, has several other functions; an  emotional function (enabling the regulation of expression and the modification of physiological activity), marking (the exploration of one's environment), social (developing appropriate interpersonal skills) and spiritual (creating a basic sense of security).

In situations of distress, in which every patient finds themselves at first, they have a tendency to seek contact with another human being. The patients' needs are not limited to receiving a proper diagnosis and treatment plan, but include building a close, deep relationship. It is only the combination of both of these elements that allows healthcare to be a service which provides comprehensive care for patients.

 Improvement in building relationships can be achieved by emphasizing the development of communication skills (active listening, body language), strengthening and modeling an empathic attitude towards the patient, as well as education in the field of occupational hygiene (counteracting depersonalization of the patient) and stressing the need to consider the psychosocial and spiritual sphere of the patient. What is especially important is training doctors to build a conscious relationship in academic conditions (safe environment, didactic supervision, feedback).

Consciously and effectively building relationships with patients will enable the full use of acquired technical skills and improve the comfort of therapy. It will also allow for better cooperation between the patient and the doctor and contribute to reducing distress in emotionally difficult situations, for both parties.
It is important that all the above mentioned competencies can be developed as part of the teaching process and should be an integral part of the education for future doctors, not only in Poland.


## 30
## Patients with hip osteoarthritis and barriers towards SDM. Adapting didactics in decision aids

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Background: Osteoarthritis (OA) of the hip is a prevalent condition among older people, and many severely affected patients need to consider surgery at some point during the disease continuum. Ideally, the decision whether to undergo surgery should be shared by the orthopaedist and the patient. Patient decision aids (PDAs) consistent with international standards may help patients to overcome barriers for active involvement in decision-making. In the context of an ongoing PDA development, the present study aims to explore barriers towards SDM in patients with hip OA during routine outpatient consultations.

Methods: Following steps in the DA$_{factory}$, a generic procedure to develop tailored PDAs, we asked consecutive patients for their permission to observe and audiotape their scheduled consultation with an orthopaedist. The material consisting of transcripts and field-notes were analysed using a combined deductive and inductive approach, guided by the Theory of Planned Behavior. An iterative process proceeded to identify factors hindering or facilitating patient involvement in treatment decisionmaking.

Findings: 19 patients (mean age 66 years old) agreed to participate in the study. The consultations lasted on average 22 minutes (range 11 – 40 minutes). Patients' observed intention to get involved actively in the decision-making process was influenced by several barriers well known in the SDM literature (i.e. limited knowledge and skills, lack of awareness about options, not used to participate in decisionmaking, trust in doctor's judgement). The combination of passive patient behaviour and dominant doctor behaviour limits the opportunities for reflected deliberations regarding the potential benefits and harms associated with available options. Acknowledging that the orthopaedist needs to spend significant time to confirm an OA diagnosis, make probable that symptoms are OA-related and determine if a patient is medically fit for surgery, less time is available for essential SDM elements (i.e. discuss pros/cons, patient values/preferences, clarify patients' understanding).

Discussion: The findings from this study are used to adapt the didactic features of a web-based decision aid for patients with hip OA to enable better preparation prior to scheduled outpatient consultations. We suggest additional SDM communication training for orthopaedists particularly targeted to this patient group to complete implementation routines of the PDA.

**31**
**"Understand I am a person and not a number:" Reproductive health decision-making among Italian women**

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Background: Italy represents a reproductive health paradox. The fertility rate is among the lowest in Europe, yet Italian women use less effective contraceptive methods. Healthcare decision-making provides one opportunity to understand women's reproductive health choices, with research indicating an increased need for patient involvement and shared decision-making. Therefore, the objective of this study was to explore Italian women's reproductive health decision-making and experiences through a shared decision-making lens.

Methods: As part of a larger mixed methods study, researchers conducted 46 interviews (June-July, 2017) with women aged 18-45 living in or near Florence, Italy who used the Italian healthcare system. Researchers used techniques from expanded grounded theory to explore women's reproductive decisions and decisional roles. HyperRESEARCH 3.7.5, a qualitative data analysis software, assisted in data organization and analysis. A constant comparative method allowed researchers to contextualize the data and identify emergent themes.

Findings: Participants expressed a desire for informed choice; however, gaps in knowledge related to hormonal contraceptive safety impacted women's healthcare access. Findings suggest Italian women may not be fully informed of their reproductive health options and need increased opportunities for decision-making involvement, considering the significance Italian women place on listening during healthcare consultations. Preferred decisional roles also emerged, with many women desiring autonomy in decision-making. Additionally, social network served

an important function as participants weighed the opinions and experiences of others when choosing a reproductive health option. The economy and religion and their relationships to decision-power suggests a complex interaction between social norms and reproductive health choices exists among Italian women.

Discussion: Findings offer practical recommendations to guide shared decision-making within reproductive healthcare in Italy to increase women's involvement and empowerment in decision-making.

**32**
**Patient-Clinician Communication and Adherence to Oral Chemotherapy**

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Background: Oral chemotherapy increasingly is used in cancer care, raising challenge of how to support patients in their use of these medications. We summarize the literature on patient-clinician communication and patients' adherence to curative oral chemotherapy, and explore whether effective communication is occurring within oncology practices.

Methods: We used the terms adherence, non-adherence, communication, treatment satisfaction, discordance, barriers, discontinuation and names of specific oral chemotherapy agents to search for interventional and observational studies of patient-clinician communication and oral chemotherapy use. Literature available before December 28, 2017 was searched via PubMed. Two team members independently reviewed abstracts to determine studies for full review. We excluded studies of metastatic disease treatment, hormone/endocrine therapy, and those not measuring patient-clinician communication and adherence. We additionally identified relevant patient-oncologist conversations by searching a database of audio-recorded and transcribed office visits from a national physician panel. We searched transcripts electronically for keywords relevant to oral chemotherapy discussions among patients diagnosed with cancer. Two research staff independently reviewed audio-recordings and transcripts, coding for the presence or absence of key communication behaviors as identified from the systematic review.

Findings: The initial search resulted in the identification of 279 articles, of which 121 were retained after title review. After reading abstracts, we retrieved the full text for 32 articles. Studies focused on a diversity of communication behaviors, including discussions of medication side effects and treatment goals. Studies also used a diversity of means by which to measure medication adherence, including patient-self report and pharmacy refills. Most audio-recorded office visit conversations were void of key communication behaviors thought to be supportive of patients' medication adherence.

Discussion: Consistent with other systematic reviews of patient-clinician communication in other clinical contexts, we found that the existent literature included few studies and employ a diversity of methods. Furthermore, among our national sample of patient-oncologist office visit conversations, we found that office visit conversations often fall short of what could be considered optimal. As the use of oral chemotherapy continues to expand within oncology care, it is important that oncologists and other clinicians understand how they can support patients' adherence to life-saving oral chemotherapy treatment.

**33**
**Analyzing a failure in communication using Argumentation and Patient-Centered Care theories**

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Background: Research discusses the role of Patient-Centered Communication (PCC) in building the physician-patient relationship. Recently Argumentation theory was also advocated. However, the interest in Argumentation in physician-patient communication is relatively new and is based mainly on a theoretical discussion. Additional research is needed on the relationship between Argumentation and PCC, in complex real-life situations. Therefore,

the present study aims to enhance our understanding of an extreme case of a communication failure by using PCC and Argumentation.

Methods: A qualitative-grounded theory analysis of an extreme case of breaking bad news encounter, to a 15-year-old boy and his father about an Inflammatory Bowel Disease. Data included observation and pre- and post-encounter in-depth interviews. The analysis focused on understanding the development of the encounter and its dynamics using Argumentation and PCC to identify the relationship between the theories and interpret the results of this encounter.

Findings: The interview with the physician showed that he believed that there was no-point in sharing much information with patients about their illness. He contradicted the basic principles of PCC related to patients' right to receive information tailored to their preferences and needs. This also contradicts the basics of argumentation theory, of engaging in a verbal and rational discussion and providing reasonable critics. This attitude led the physician to give a misleading explanation, flawed argumentation/manipulation, of downplaying the chronic nature of the disease. Then he focused on the treatment suggested, that seemed too extreme and scary for the father, who did not understand the disease. This way of communication led to an argument, misunderstandings, and discontinuation of the relationship.

Discussion: As opposed to studies using argumentation theory, which focused on ideal models of physician-patient interaction, here, we focused on a real-life, complex communication. Real-life practices require working on **physicians' attitudes concerning patients' rights for information and involvement in care, physicians' methods of** informing, and their ability to share information and reasoning, without negatively using their power and authority. Training physicians to use Argumentation might help them learn how to explain the disease and treatment options, allow patients to share their viewpoints, and be active members in the discussion.

## 34
## Development and evaluation of a patient empowerment program to support SDM in cancer care

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Introduction: Many cancer patients want active engagement in treatment decision-making. Programs which encourage patients to ask questions during a clinical encounter can strengthen their abilities to engage in the decision-making process. The Ask Three Questions program was developed and evaluated in Australia. Different versions of the program were used in implementation around the globe. So far, the program is not available in German. The aims of this study were to develop a German version of the program, to assess its feasibility in German routine care and to measure effects on SDM adoption.

Methods: First, different English versions of the Ask 3 Questions program used in prior studies were translated into German. The translation process followed recommendations from the team translation protocol TRAPD (Translation, Review, Adjudication, Pretesting and Documentation). Second, comprehension of the translation was tested via cognitive interviews with patients (n=10). Health literacy was assessed by HLS-EQ-16. Three team members conducted qualitative analyses. Third, feasibility of the German version will be assessed in focus groups with patients and clinicians. Finally, clinical consultations will be audio-recorded before and after the implementation of the Ask 3 Questions program. They will be analyzed by (1) counting the use of the three questions, and (2) measuring adoption of SDM using the OPTION[5] scale.

Preliminary Findings: Patients of different age (49.0 yr ± 11.27), gender (f=5, m=5), years since first diagnose (4.8 yr ± 3.55) and different health literacy levels took part in cognitive interviews. Comparison and testing of different versions of the three questions lead to a revised version, which was understood and accepted best by German patients. All participants found the Ask 3 Questions program helpful for use as poster or flyer in waiting rooms. Final analyses on feasibility and effectiveness of the program in Germany will be presented at the conference.

Discussion: This study provided a German version of the Ask 3 Questions program to be used in Germany for the first time. Preliminary results suggested, that the Ask 3 Questions program could be a helpful instrument to empower patients to be an active part of the decision-making process.

## 35

**PHYSICIANS AND NURSES PERCEPTIONS AND ATTITUDE TOWARDS EFFECTIVE COMMUNICATION AND COLLABORATION IN ACGME-I PEDIATRICS INPATIENTS PROGRAME IN QATAR**

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Introduction: Effective communication between physicians and nurses is associated with better quality of care to patients, increase teamwork and job satisfaction for both. Our aim was To explore and compare the perception and attitude of physicians and nurses toward proper communication and collaboration with each other and to highlight areas that needed the greatest opportunity for improvement

Methods: A cross sectional survey were administered from September until November 2015 to the pediatricians and nurses on pediatrics inpatients wards at Hamad Medical Corporation the main tertiary hospital in the state of Qatar, questioner included details of demographics, perceptions and attitude towards proper communication and collaboration in daily clinical practice. Questions offered objective answers utilizing the 4 -point Likert scale that can be used to perform statistical analysis.

Finding: Out of 124 responses,83 (67%) were Pediatricians and 41(33 %) Nurses.(69%) of pediatricians stated that they enjoyed communication with nurses compared to (41.5%) of nurses(P <0.012). (67.5%) of physicians had a good communication with nurses compared to (44%) of nurses (P< 0.039).small percentage (10 %) of pediatricians stated that they share decision with the nurses similarly(5 %)from nurses side( p<0.172).in term of putting plan together before making decisions pediatricians had (6%) agreement comparatively to nurses who specified(13%)(p<0.11). Cooperation in decisions had nearly similar response from pediatricians side (14.5%) and nurses side (14.6%)(p < 0.1).

Discussion: Generally this study showed that physicians and nurses share same idea about enjoying communication and collaboration among each. as compared to nurses, physicians were more satisfied with their collaboration with nurses. Sharing decisions is a great area of concern as it represent ignoble percentage of positive result in both sides, which will be an intense area to work on.

Creating a conducive environment with regard to improve the collaborative activities for all staff in the same time conduct an environmental tools to work on nurse-physician relationships will be a huge work load. Implementing job workshops, seminars on interpersonal and professional communication skills which will be excellent tools to be used for improving the collaboration and increase effective communication among staffs

**36**
**Optimization of teamwork through team coaches in rehabilition teams in Germany (TOp- Team)**

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Background: The work routine in rehabilitation clinics in Germany puts great emphasis on teamwork and communication in order to treat patients successfully. Team coaching offers the possibility to improve outcome criteria regarding patients, staff and the organization (Körner et al., 2016). Although there is a high need for team interventions, little attention has been given to team coaching within the healthcare sector (Budhoo & Spurgeon, 2012). A study on team coaching in rehabilitation clinics showed that through the intervention, which was carried out by external coaches, knowledge integration, responsibility and team organization was improved (Körner et al., 2017). The aim of this project is further development of the team coaching intervention via a train- the- trainer concept that enables team leaders to implement coaching tools within their working routine.

Methods: The concept design of the train-the trainer concept was based on a review of the literature and a workshop with experts. 17 participants of the areas of clinic, coaching and research took part in group discussions. Four groups with participants of each area discussed content, conditions for implementation, characteristics of future coaches and methods for evaluation. The results were shared and discussed in a plenary session.

Findings: Based on the literature research and the experts' discussions, a manual for the train- the- trainer- concept was developed. It consists of two modules, which are carried out on two separate training days with eight weeks in-between. It was decided that a coach could be any leader of a team (mono- or interprofessional) in rehabilitation clinics. The intervention contains elements of the successfully evaluated intervention of the former study to patient-centred team development (PATENT), such as a module on the team's goal orientation and methods of systemic counselling. It was extended by a module on the role of a coach and self- reflecting exercises. Furthermore, conditions for implementation were discussed and fixed.

Discussion: The train- the- trainer concept is a promising tool to improve teamwork in rehabilitation clinics in the long run, as it enables team leaders to implement coaching tools in their working routine without being dependent on external coaches.

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## 37
## International collaboration in a European border-region: patient safety risks and solutions

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Background: Cross-border collaboration exists to help reduce disadvantages of borderregions, especially in the health sector. The amount of cross-border patient transfers is expected to expand in the upcoming decade due to increased mobility of citizens and centralized expertise of healthcare professionals. Although cross-border patient transfer has advantages, previous research suggested that the complexity of cross-border care may negatively influence patient safety (Ruggeri & Hinrichs-Krapels, 2016). However, it remains unclear what the exact risks of cross-border patient transfers are. With this study we aimed to explore themes that reflect healthcare professional's experiences with cross-border patient transfer to identify the risks and possible solutions to optimize patient safety in cross-border transfers.

Methods: A total of 846 healthcare professionals working in one of four large hospitals or regional emergency services in the Euregio Meuse-Rhine (EMR) completed a survey with closed and open-ended questions about cross-border patient transfers in this border-region. Qualitative responses about the largest patient-safety risks and possible solutions in the context of cross-border patient transfer were thematically analyzed to identify themes (Braun & Clarke, 2006). Semantic themes were identified inductively by a step-by-step analysis of the 408 entries of existing risks and the 373 entries of possible solutions.

Findings: Five main themes regarding risks were identified: awareness ("Wrong expectations towards each other"), communication ("People do not listen carefully to ambulance personnel during transfer"), competency, facility, and information ("Due to the lack of a uniform system as well as the lack of documentation of the already collected patient information, suspected unimportant information is quickly discarded and not passed on"). Potential solutions were categorized in the preliminary themes communication, training, and shared standards.

Discussion: Investigating the experience of healthcare professionals showed actually existing patient safety risks in cross-border transfer settings, and provided a broad spectrum of solutions to optimize international patient transfers. It can be concluded that communication plays a central role: a lack of communication was perceived to have negative impact on patient safety, and improving communication was put forward as one of the possible solutions, e.g. by means of joint training, which could be an important step towards patientsafer cross-border healthcare.

**38**
**Development and Evaluation of a Communication Skills Training for Nurses in Rehabilitation**

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Background. Nurses are usually educated to work in acute care hospitals and are therefore less prepared for communicative and educational duties required in rehabilitation (Hotze, 1997; Hotze & Winter, 2000).

The goal of this study was to develop a communication skills training for nurses that meets the specific needs in rehabilitation centers. Additionally, we evaluated the effect of the training on the quality of interaction.

Methods. During a two day in-house training nurses were trained in basic conversational skills as well as in dealing with challenging situations (e.g. complaints, psychological problems or non-compliance).

In six participating rehabilitation centers 44 nurses and patients rated the quality of their admission interviews before and after training with the Conversation Rating Questionnaire (CRQ; Dibbelt et al., 2014). The CRQ consists of 22 items, which describe (nurses) behavior and affective aspects of the interaction. A patient and nurses version was used.

Scores of positively worded items were aggregated to an index of communication promotors and negatively worded items to an index of communication disturbers. Wilcoxontests for dependent samples were performed to compare the means of indexes in the baseline (before) and in the intervention group (after training). N=637 cases were included in the baseline and N=428 cases in the intervention group.

Results. The nurses' ratings of the communication promotors in their admission interviews tend to be higher after training, whereas the ratings of communication disturbers tend to decrease.

On the contrary, the patients' ratings of the communication promotors tend to decrease in the group after training, whereas ratings of communication disturber increased. However, none of these differences were statistically significant, neither for the entire sample nor for single rehab centers.

Discussion. Ceiling effects might be the reason why increased ratings in the intervention group did not reach statistical significance (nurses). The nurses and patients knew that their interaction would be rated afterwards. This probably improved communication behavior in the baseline. Methods to control this "checklist-effect" will be discussed during the presentation.

**39**
**Assessing the Referral Process of Patients with Medically Unexplained Physical Symptoms (MUPS)**

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Background: Many patients lack knowledge, motivation and self-efficacy to get engaged in their own healthcare. The referral process should provide medical specialists and General Practitioners (GPs) relevant information to support patients' needs, questions and understanding of information to become and stay engaged. This is especially important for patients with MUPS, as doctors find these patients more difficult to deal with than other patients. In the past years, health care interventions such as postgraduate MUPS education and Dutch guidelines for referring aim to improve the referral process. This study aims to evaluate the effectiveness of these interventions by re-examining the quality of current referral process for patients with MUPS.

Methods: For the baseline, referral letters of GPs and reply letters of medical specialists were selected belonging to consults of patients taking part in a MUPS-study on specialist training in 2011-2014, from six hospitals in mid and west of the Netherlands. Current referrals and reply letters are selected from consults in the first quarter of 2018. Referral letters are assessed on supportive quality aspects (e.g. the referral question concerning the defining symptoms, patients requests, overall treatment and diagnostic plan, diagnostic and causal considerations, communication with patient) and information quality aspects of the medical history. Reply letters are assessed on answered referral questions and patient requests mentioned in the referral letter. All letters are blindly scored on a digital scale by a panel of 3 specialists and 3 GPs.

Findings: Preliminary results of first 90 baseline referral and reply letters indicate that the majority of referral letters lack an overall treatment and diagnostic plan of GP and has little information on communication with the patient.

Discussion: This study demonstrates the quality of the referral process for patients with MUPS. Inadequacies will be noted and adjustments to improve the referral process will be suggested and discussed within the participating hospitals and allied GP practices. As a result we expect an improvement in the supportive quality of the referral letters and more answered referral questions and patient requests in the reply letters.

## 40
## Development of a national interprofessional communication skills and teamwork curriculum for undergraduate medical education

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Background: The significance of Interprofessional education (IPE) is broadly recognized and health policy-makers support the development and implementation of IPE. There are concrete measures in medical education in Germany: within the Medical Licensure Act from May 2012 the willingness to collaborate with other health care professionals is promoted. The Masterplan Medical Studies 2020 provides that the medical faculties integrate common courses with students of other health care professions in their curricula. Based on these conditions, a project was initiated that aims to support the integration of interprofessional education and to develop a national, interprofessional communication skills and teamwork curriculum for medical students. The project is supported by the Robert Bosch Foundation.

Methods: Interprofessional thematic areas were defined with the aim to provide a uniform framework for IPE at the medical faculties. Expert-groups representing different health care professionals, e.g. nurses, pharmacists, physiotherapists, psychotherapists, physicians and medical students identified in a multi-step procedure crucial interprofessional job-related fields where effective interprofessional collaboration plays an important role in patient care. These fields were classified according to symptoms and diseases, settings, occasions and problem oriented prototypes. On this basis a blueprint was created. Existing best-practice examples of teaching and assessment of interprofessional skills are collected, edited following a certain standard and classified according the above-named categories.

Findings: Based on the evidence on interprofessional collaborative care and results of the expert-groups a draft curriculum was developed. The draft consists of 50 teaching units distributed among 8 days á 6 teaching units and 2 teaching units for assessment. The occasions relevant for daily job-related situations (e.g. handover, discharge management etc.) were defined as a main category. These occasions were allocated to four Core Competencies: teamwork, roles and responsibilities, communication, ethic and values. All the best-practice examples with related teaching materials and background information are uploaded into the online-platform - toolbox.

Discussion: The draft curriculum provides the possibility to create a uniform framework of IPE for the medical faculties. The medical faculties can organize their teaching individually based on different diseases, settings and problem prototypes and place their own faculty-specific focuses.

## 41
## Online searching for cancer information: A HINTS analysis of individuals with a cancer diagnosis

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Background: Previous research has assessed the U.S. general population's online cancer information seeking behaviors. However, less is known about the behaviors of those who have been diagnosed with cancer. This study aimed to: (1) Describe the proportion of individuals in the U.S. diagnosed with cancer who have searched the internet for cancer information; and (2) Explore predictors of online cancer information searching among this group.

Methods: Data were from the Health Information National Trends Survey (HINTS). Cycles from 2012, 2014, and 2017 were combined and analyzed. We used two questions to operationalize online cancer seeking activity among those with a cancer diagnosis: *"In the past 12 months have you used the internet to look for information about cancer for yourself?"* and *"The most recent time you looked for information about health or medical topics, where did you go first?"* A weighted logistic regression model calculated odds of internet information searching.

Findings: Nearly three quarters of individuals diagnosed with cancer (N=1065 of N=1510) reported using the internet. Of those online, 36.4% (n=391) reported using the internet in the past 12 months to look up information about cancer for themselves, while 66.7% said they go to the internet first for information about health or medical topics. The strongest predictor of searching online cancer information was the amount of time since the last cancer treatment; those still in treatment and those who had most recently received treatment had significantly higher odds of cancer information searching. Age, education, and health status also predicted cancer searching behavior. Only age and education predicted using the internet first.

Discussion: Findings indicate that online cancer information seeking by those diagnosed with cancer may be more prevalent than previously reported. Additionally, individuals who have recently transitioned into cancer survivorship care continue to use the internet for cancer information. However, results also suggest continued disparities and a Digital Divide in internet seeking behavior, with older and less-educated individuals less likely to seek information online. Future research should examine how to best help these patients navigate online cancer information to address the inequities in internet use and information seeking behaviors.

**42**
**Electronic medical record impact on patient – physician interactions in ambulatory pediatric clinics sitting Doha, Qatar**

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Background: Electronic medical records (EMR) are becoming an essential part of health care systems, as they can improve access to health records, standardize care and reduce medication errors. However, excessive occupation of the physician with the computer during a patient visit encounter can negatively affect the patient –physician interactions and the overall satisfaction with the visit. Our aim was to decrease the percentage of physician-computer interaction time during general pediatric fellows' clinic visits

Methods: A 23 physician survey were conducted to look for the most likely cause for the increased physician-computer interaction time. A data collection tool was designed to record the physician interaction with the patient and the physician using direct observation. The interaction time in the clinic visit was monitored for the pre-and post-intervention phase.

Finding: Our baseline observation showed that general pediatric fellows are spending more than 42% of their clinic visits interacting with computers rather than interacting with patients. Further analysis of our data showed that prescribing medications consumed an average of four minutes and was the most common cause of increased physician-computer interaction time. This was followed by reviewing patient history (0.5 minutes) and by reviewing medications (0.5 minutes). Of the survey respondents,83% chose prescribing medications as the most common defect which supported the data obtained from the observation . All physicians completed their documentation after the clinic visit

To overcome this problem, we introduced a feasible intervention of a list of favorite medications to physicians in outpatient clinics.

After implementing this intervention, the physician-computer Interaction time significantly decreased from an average of 42% to 15%, exceeding our target.

Discussion: We concluded that prescribing medications and finding the right EMR diagnosis code was the main cause for the physicians spending more time with computers during the clinic visit. After applying our intervention we were able to improve patient-physician interactions time. Further studies are needed to look into the time needed to complete the documentation which has not been included here and other means to further enhance patient –physician interaction.

## 43
## Spirituality and Hospitalization Experience of Patients (SHEPS) Study

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Background: Studies have shown a direct relationship between patient satisfaction and patients following their physician's recommendations which leads to favorable outcomes. While several physician and patient-specific characteristics have been associated with patient satisfaction, the effect of patient's spirituality on patient satisfaction with hospitalization has not been examined. The objective of this study was to examine an association between a patient's spirituality level and patient satisfaction with physicians during hospitalization.

Methods: Hospitalized patients older than 18 years and who provided consent completed a questionnaire which collected information on patient's age, gender, and race and included following two validated tools a Daily Spiritual Experience Survey (DSES) and a validated patient satisfaction tool for hospitalized patients (TAISCH). Patient satisfaction was further assessed using an internally developed 5-question satisfaction tool. Mixed linear regression models were created to examine the effect of spirituality on patient satisfaction to account for correlation in observation due to group of patients seen by the same physician. All analyses were performed in R 3.1.1 using 'lme4' package.

Findings: Of 463 patients, 260 (55.4%) were females and 55 (11.7%) African Americans with mean age of 52.3 (19) years. Mean spirituality score was 29.4, TAISCH score 18.9 and 5QS score 22.4. With both satisfaction scales, we found a statistically significant increase in patient satisfaction with increasing level of spirituality. In the unadjusted model, each one percent increase in DSES score (1% decrease in spirituality) was associated with 0.21% (p<0.001) decrease in patient satisfaction with physicians measured by 5QS and 0.14% (p=0.002) decrease in patient satisfaction measured by TAISCH. The results were robust to adjustment for patient's age, gender, and race.

Discussion & Conclusion: The study shows a strong positive correlation between a patient's spirituality and satisfaction with the patient-physician relationship thus adding to the current literature on need for physicians to better understand and address spirituality and communicate this with patients. The results are an important step towards understanding how to educate physicians regarding communication of spirituality to better meet a patient's needs. With patient-specific communication strategies, we can further improve patient satisfaction and subsequently improve patient outcomes.

## 44
## A qualitative synthesis of patients' experience of being invited to participate in surgical trials.

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Background: Recruitment to surgical randomised controlled trials (RCTs) is difficult, with barriers encountered that are not present in RCTs of non-surgical interventions. Several qualitative studies exploring these barriers from patient perspectives have been published. However, little attempt to synthesise the growing body of qualitative evidence specific to surgical trials has been made. This qualitative evidence synthesis aimed to answer the following question: 'What is the experience of patients who are invited to participate in surgical trials?'

Methods: One author searched the following databases to identify published literature: MEDLINE, Web of Science (Social Science Citation Index and Science Citation Index), and CINAHL. Studies exploring patients' (aged 18 and above) experience of being invited to participate or participating in a trial where at least one the treatment arm was surgical were included. Studies that were not published in English were excluded. Thematic synthesis was used to

analyse the data. This method involved: i) grouping the data from the primary studies and applying codes based on content, ii) developing descriptive categories by organising and comparing codes and iii) developing analytical themes by exploring the categories in depth.

Findings: From the electronic databases, 8629 studies were identified, 8463 of which were excluded from title and abstract screening. Full text was retrieved for 427 studies, 17 of which were deemed to meet the review inclusion criteria. Data from these studies were extracted and synthesised into three themes: i) making sense of the trial, ii) weighing up the best option and iii) trust. To make sense of the trial, patients endeavoured to reconcile the information they received with their existing knowledge and beliefs. Patients reached a decision about participation by weighing up the information they acquired, with the risk and benefits they perceived of trial participation. Trust shaped how patients made sense of the information that they were given and was reinforced or damaged depending on whether they were able to accept information about the trial.

Discussion:  Through these themes, this synthesis highlights factors that are difficult for patients to understand and accept and factors that are important to patients when making a decision about participation.

## 45
## Provider use of a participatory decision-making style and satisfaction with pediatric asthma visits

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Background: We conducted a randomized controlled trial to test the effectiveness of an asthma question prompt list with video intervention to engage youth during visits.  We examined whether: (a) providers included youth and caregiver input more into asthma management treatment regimens, (b) youth and caregivers rated providers as using more of a participatory decision-making style, and (c) youth and caregivers were more satisfied with visits.

Methods: English or Spanish-speaking youth ages 11-17 with persistent asthma and their caregivers were recruited from four pediatric clinics in North Carolina were then randomized to the intervention or usual care groups.  Youth in the intervention group watched the video with their caregivers on an iPad and then completed a one-page asthma question prompt list before their visits. All medical visits were audio-tape recorded, transcribed, and coded for communication content. Generalized Estimating Equations were used to analyze the data.

Results: Forty providers and 359 of their patients participated. Providers included youth input into the asthma management treatment regimen during only nine visits (2.5%) and caregiver input into the during only twelve visits (3.3%).  Youth in the intervention group were significantly more likely to rate their providers as using more of a participatory decision-making style than youth in usual care (odds ratio=1.7, 95% confidence interval=1.1, 2.5). White caregivers were significantly more likely to rate providers as more participatory than non-White caregivers (odds ratio=2.3, 95% confidence interval=1.2, 4.4). Youth who rated their providers as being more participatory were significantly more satisfied with their visits (beta=4.9, 95% confidence interval=3.3, 6.5). Caregivers who rated their child's provider as being more participatory were significantly more satisfied with their visits (beta=7.5, 95% confidence interval=3.1, 12.0).  Both youth (beta= - 1.9, 95% confidence interval= -3.4, -0.4) and caregivers (beta=-8.8, 95% confidence interval= -16.2, -1.3) who spoke Spanish at home were less satisfied with visits. The intervention did not significantly impact youth or caregiver satisfaction with the visit.

Conclusion: This study showed that youth and caregivers are more satisfied with pediatric asthma visits if they perceive that the providers uses more of a participatory decision-making style.

## 46
## Communicating Risk in Dementia Care: Involving Service Users in Data Analysis

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Background:  Service user involvement in research is accepted as good practice although there are few examples of participation in data analysis. The aim was to explore the involvement of people with mild-moderate dementia in qualitative data analysis.

Methods:  Four individuals who recognised that they had a dementia diagnoses were recruited as co-researchers. Data were anonymised extracts of interviews with people with dementia who participated in a grounded-theory study of risk communication in dementia care (Stevenson et al, in press). The session included a presentation on the **project and clarification of 'co-research', followed by two interactive twenty**-minute exercises on risk communication. Exercises involved group discussion guided by pre-prepared prompts. A combination of role play between the facilitators and hand-outs were used to present anonymised quotes and extracts. Ideas and comments were written up on a flipchart, constituting a visual reminder. The session centred on generating ideas and themes from the perspective of co-researchers with dementia rather than verification of interpretations by the core research team. The session was evaluated using open-ended questions in paper format. The Office of Research Ethics Committees (Northern Ireland) granted approval.

Findings:  The patient participation improved quality by enhancing validity of findings through multiple perspectives; creating a more contextualised understanding of findings; and generating sub-themes for exploration in subsequent interviews. The co-researchers derived meanings from the data, identified and connected themes. Co-researchers reported a sense of empowerment in having an opportunity to apply their cognitive abilities. It was important to re-emphasise to the group that their involvement was not as participants in the study but in making sense of interview data as members of the research team.

Discussion and Conclusions:  Limitations were that to make the exercise feasible, the research team selected extracts for consideration by the group; and the group would have benefited from greater understanding of research analysis. Involvement of patients in data analysis is feasible, but clarifying role is essential.

Reference:

Stevenson M, Savage B & Taylor BJ (in press) Perception and communication of risk in decision making by persons with a dementia. Dementia: The International Journal of Social Research and Practice, **doi:**10.1177/1471301217704119

## 47
## Received knowledge of elective surgical patients and their trust in hospital staff: a cross-sectional multicentre study

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Aim:  Received knowledge of elective surgical patients and their trust in hospital staff: a cross-sectional multicentre study

Methods:  We used the following instruments in this cross-**sectional multicentre study: Hospital Patients' Received** Knowledge (HPRK) and a questionnaire to measure trust in an emergency department. The main variables were 40 items about received knowledge and 3 items on trust in physicians. N=147.

Results:  **There is a positive association between the patients' self**-reported knowledge that they received related to the hospital stay and their trust in the physicians (**Pearson's r between the knowledge index and the trust index, r =** 0.416, P < 0.01).

Discussion:  The association between the two main indexes is not strong, but is positive and significant. Similar findings has been made in a few other studies, but not designed like this, including patients from several departments and not in the setting of elective surgery.

**The study suggests that successful patient information is positively related to patients' trust in hospital staff.**

## 48
## Connecting Family Communication And Patient Care: A Qualitative Analysis of Written Reflections

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Background: This project integrates reflective practice in medical education with current advances in family communication research and theories. Patients share straightforward statements such as fears about how their diagnosis connects to their family life. Physician reflection can sharpen awareness to implicit, indirect, subtle communication messages that contextualize patients' illness experiences. Reflective learning in medicine can shift the lens of seeing through internally examining a trigger experience or exploring an issue of concern, creating or clarifying meaning, and changing conceptual perspective. This project examines physicians' written reflections that offer insight into their understanding both the stated and the tacit aspects of their observations about patient experiences of illness connected to family life.

Methods: Tufts University Family medicine residents (N= 33) of the Tufts Family Medicine Cambridge Health Alliance completed three reflective exercises each week over the course of one year (N=756 reflective entries). An interdisciplinary research team identified family communication concepts within the reflections.

Findings: Identified themes include 1) physicians recognizing interdependence and collaborative interplay about how communication within and about families connects to patient disclosure, 2) physicians paying attention to subtleties of patient behavior as indicative of a fuller picture of patients' family lives and their family support in coping with illness, and 3) physician images of growth and awareness about communication indicative frustrations or dilemmas about patients' family lives. Results provide qualitative empirical evidence for reflection about family communication enhancing attentiveness to relational components of clinical practice and fostering physicians' abilities to acknowledge, identify, and express human capacities.

Discussion: This project allows for medical educators, family communication scholars, and clinical practitioners to identify competencies for reflection about communication to use extend theory and application for family communication and medical education. Building on family communication processes and challenges of interdisciplinary and translational research, results illustrate the development of attitudes coincident with medicine, including ability to critically assess family communication and improve patient care. The representative sample of medical students, comprehensive analysis, inclusion of a year of reflections, and cohesive interdisciplinary analysis yield high validity in identified communication processes.

**49**
**Cancer Caregiving at the End of Life: How Much We vs. How Much Me?**

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Background: Advanced cancer patients and their spouse caregivers are encouraged to collaboratively confront stress using we-based coping strategies. Less attention has been given to the enhancement of caregivers' personal agency ("I can do this"), especially as they take on increasing care responsibilities at the patient's end of life. Conversational pronoun use has been used to assess personal agency and collaborative coping. We explored natural language use of personal and communal pronouns and the association with expressed emotions during hospice nurse visits.

Methods: One audio-recorded home visit for 76 hospice cancer patient-spouse dyads was transcribed as part of a secondary data analysis of a multi-site observational study. Linguistic Inquiry Word Count (LIWC) software, concordances, and descriptive statistics were used to compare patient and caregiver speech for pronouns and emotion terms.

Findings: Most caregivers were female (60.5%), slightly younger than patients (M=64.7 vs. 67.4 years), and the average length of relationship was 35.4 years. Caregivers used proportionally more first-person singular (I-talk) than first-person plural (we-talk; 4.90 vs. 1.38%). However caregivers used significantly less I-talk (4.90%) than patients (7.7%; $\chi2=386.55$; DF=1; p< 0.01) and less than LIWC measures of natural occurring speech (7.7%; $\chi2=7.6s$; DF=1; p= 0.01). Caregivers also used significantly less emotional language overall (59.55% of speech) when compared with

PTs (70.06%; χ2=1319.95; DF=1; p< 0.01).Caregiver we-talk was significantly more emotional (69.19%) than I-talk (62.47%; χ2=423.02; DF=1; p< 0.01).

Discussion: While linguistic analysis suggests that spouse caregivers use proportionally more pronouns related to personal than to communal agency, they used less personal pronouns than patients and less than what is expected in naturally occurring conversations. Caregivers may need more personal empowerment to support them in round-the-clock care at end of life.  Additionally, caregivers may be able to more freely express emotions related to joint stressors, but struggle to express feelings related to their personal ability to cope with the unique stressors of caregiving at end of life. There has been a recent surge of interventions designed to enhance couples' coping in advanced cancer; although couples' collaboration is critical, we caution that it should not be at the cost of caregivers' personal agency.


## 51
## Improving the informed consent process with a digital tool created for and with patients

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Along their course of care, cancer patients may be asked by their doctors to participate in clinical trials. Clinical trials are research studies that explore whether a medical strategy, a new treatment or a device, is safe and effective for humans. Accepting or refusing to participate in a clinical trial can be a complex decision, due to the unknown risks and potential benefits of not yet proven new treatments or procedures, but also, due to the exceptionalism of research. In order to facilitate the decision process, an interactive digital tool has been produced. Composed with 3 videos and an interactive menu, the tool tries to answer patients' interrogations along the informed consent process. First, a video explains the role and place of research in the course of care. All cancer patients are likely to watch the video, and reflect on the opportunity to become a research participant.  Second, another video demystifies different core aspects of clinical trials and repurposes the invitation to participate in a clinical trial. This video is dedicated to patients who have been approached for trial participation. Third, an interactive menu provides a reading guide to understand the structure and sections of informed consent forms. Composed of fourteen video sequences, the tool guides patients during the reading, and invites them to search in the document the answers of fourteen questions that are related to the main differences between the standard of care and the clinical trial protocol. Fourth, the last video presents research as a partnership between researchers and patients. The accountability of researchers is highlighted, and research participation is depicted as a gift. In conclusion, our approach combined a scientific reframing of research, dedicated to pinpoint the differences between research and care, and different strategies to engage patients to read and reflect on the specificities of the clinical trial option.

NB: To grasp the real perspectives and concerns of patients, the project team collaborated with a local patient organization, and co-operated with patients who felt engaged to co-create the digital tool with the professionals.


## 52
## Development of the Japanese Version of the International Patient Decision Aids Instrument (IPDASi ver. 4.0): Translation and Linguistic Validation

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Background:  Patient decision aids (PtDAs) are evidence-based tools designed to help people in making informed decisions about treatment or testing options. International Patient Decision Aids Standards Collaboration developed a tool for assessing the quality of PtDAs. There has been increasing interest in shared decision-making

and the use of PtDAs in Japan. However, no tool has yet been developed for Japanese-speaking users. We aimed to translate the International Patient Decision Aids Instrument (IPDASi ver. 4.0) into Japanese and assess the quality of Japanese PtDAs.

Methods: The original English version of the IPDASi (ver. 4.0) was translated into Japanese through a five-step process for cross-cultural adaptation, as described by Beaton et al. In the first stage, two researchers whose native language was Japanese made forward translations from English to Japanese. In the second stage, the two independent translations were synthesized into a Japanese version. In the third stage, two English back translations were performed by two native English language translators. In the fourth stage, an expert committee comprising of six nursing researchers and two health sociology researchers reviewed it. We discussed the material for sematic, idiomatic, experimental, and conceptual equivalences between the original IPDASi ver. 4.0 and the synthesized version to develop the Japanese IPDASi ver. 4.0. In the fifth stage, the Japanese IPDASi ver. 4.0 was used to assess the quality of Japanese PtDAs.

Findings: Six Japanese PtDAs were included to assess the quality of Japanese PtDAs. The decision in PtDAs were about menopausal hormone therapy for menopausal women (n=1), prenatal screening (n=1), surgery breast cancer (n=1), long-term feeding tube placement (n = 1), medication for schizophrenia (n=1), visit to clinic for infertility treatment (n=1). Five of six Japanese PtDAs met all qualifying criteria. The median score for qualifying criteria was 6 (range 5-6). The mean score for certification criteria was 2.6 (range 1.8-3.3).

Discussion: Through procedures, a linguistically validated Japanese version of the IPDASi ver. 4.0 was successfully developed, which can be used to assess Japanese PtDAs.

## 54
## An integral Pro Active Multicomponent Approach (PAMA) to optimize and tailor smoking cessation strategies for the primary health care (PHC) setting

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Background: Smoking is responsible for 13% of the Dutch morbidity load, equivalent to €43 million. Via the primary health care (PHC) setting many Dutch smokers can be reached and offered evidence-based smoking cessation support. However, individual patient preferences are rarely taken into account, although this might have a positive effect on support adherence and subsequent cessation success. We therefore aim to develop and test a decision tool (PAMA) to facilitate personalized cessation support decision making between health professionals and smokers to make an informed shared decision between the different available evidence based smoking cessation support strategies to stimulate use and successful quit attempts.

Methods: The decision tool will be tested in a randomized controlled study among smokers (n=900) using three measurement points (baseline, six and twelve months) comparing the tool with care as usual. Multilevel analysis will be used to test for the main effects of intervention exposure. Intervention moderation effects in regard to educational level, motivation, age and gender will also be assessed. Our outcomes will focus on 1. Point prevalence abstinence; 2. Prolonged Abstinence; quit attempts; number of cigarettes smoked; 3. Program appreciation; level of informed decision making; 4. Reach. A cost-effectiveness assessment and process evaluation will also be conducted.

Preliminary findings: At the moment of writing we are in the inventory phase to explore the current level of referral in the PHC to evidence-based smoking cessation strategies together with the corresponding barriers and needs. We are also making a design for the content of the tool by using co-creation panels consisting of smokers, the PHC and other stakeholders. The design for the decision tool will be based on the obtained data together with relevant literature.

Preliminary implications of research: If the tool proves (cost-) effective, an implementation guideline will be developed to facilitate national implementation.

Request for feedback: What are your experiences with recruiting and motivating general practices to use decision making tools with their patients?

**55**

**Measuring with an eye-tracking device the relationship between eye gazing behaviors of medical students toward the picture of facial expressions and their communication styles**

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Background:  The purpose of this study is to investigate how medial students' communication styles make differences in their eye gazing behaviors toward pictures of six emotional facial expressions

Methods:  Questionnaire of communication styles was administrated to twenty-two second year medical students. Each picture of six major emotional facial expressions (happiness, sadness, anger, fear, surprise, disgust) on the computer screen was shown to the students and their eye-movements were tracked and recorded by an infrared eye-tracking system (Tobii Tech). The data of total fixation duration from two areas of face: eye area and lower face areas (including mouth and cheeks) was analyzed with the Tobii Studio 3.3.1 software.

Results:  In general, all fours (driver, amiable, expressive, analytic) communication types showed much longer total fixation time on the eye area (n=22, mean=1.640sec) than the lower face area (n=22, mean=0.550sec). The driver type tended to gaze at eye area much longer than lower face area particularly in those strong negative emotional facial expressions such as fear (mean =2.67sec) and anger (mean=2.473 sec), compared to other types. The expressive type spent the highest eye gaze allocation time in lower face areas for all emotional expressions but 'sad' emotion. The amiable type showed the longest eye gazing in happiness, surprise, sadness.

Conclusions:  The results revealed that all types spent more time gazing on the eye area in response to emotional facial expressions. And as the results also showed that the driver type was a strong eye gazer in negative expression and the expressive type was a low face gazer, and the amiable was a comforter, using the eye tracking device, we were able to show the reasonable connections between the traits of communication types (Merril & Reid, 1981) and eye gaze behaviors. Human faces provide important social cues, and how we perceive facial expressions of others is fundamental to social communication and it is particularly of importance for those people in the medical field.


**56**

**Global Health Crisis: Phases of Media Coverage of the Deadly Ebola Virus Disease.**

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Background: Ebola Virus Disease (EVD) has become the preeminent neglected disease because of its rapid transmission, not only in the urban areas of affected countries but also in other parts of the world. These neglected diseases, estimated to affect one-sixth of the world's population mainly in the developing countries, are leading causes of mortality, chronic disability, and poverty. Although health practitioners expected the 2013-2015 Ebola crisis to reach catastrophic proportions, the world-wide vigilance reduced the death toll.  The steady increase in pharmaceutical activity and scholarly interest in Ebola and other Neglected Tropical Diseases (NTD) can be attributed to media coverage of recent international health crises. Using the coverage of the Ebola crisis by U.S. newspapers as the textual frame, this study focused on the reportage through the phases of the health crisis. The implications of the cyclical prisms of news coverage through the phases of health crises are discussed with corresponding recommendations for scholars and practitioners.

Method: Descriptive content analysis was used to investigate US media coverage of the 2013-2015 EVD crisis; a period generally regarded as the limits of the information diffusion process and media interest in the deadly disease. Published articles in regional and national newspapers including The New York Times, USA Today, Washington Post, Los Angeles Times, and the Atlanta Journal Constitution.

Findings: The results supported previous research that demonstrated cyclical phases of media coverage of crisis (Howell & Miller, 2006). The coverage of the 2013-2015 EVD by US national and regional newspapers followed the predicted pattern through the duration of the outbreaks and containment. Significant mean differences were also found with national newspapers providing a more comprehensive coverage than regional newspapers.

Discussion: Through the articles published in US newspapers, this study documented consistency with previous research that found media content reflect the crisis life cycle. These results add to the plethora of research on media coverage of international health crises. Future studies should investigate other factors responsible for variability in US media coverage of health crises and other global health challenges.

**57**
**Patient enablement in consultations: a mixed methods study analysis through a philosophical lens**

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Background: Martin Buber's existentialist perspective provides an approach to evaluating patient-doctor relationships in terms of consultation dynamics and the outcome of patient enablement. Buber contrasts two different approaches to dialogue: the "I/It" and the "I/Thou" interaction that allows us to consider the key elements of patient-centeredness, authenticity and presence that should theoretically underpin data on enabling consultations.

Methods: Routine consultations in UK general practice were studied to develop an insight into the mechanism underlying patient enablement (measured with the Patient Enablement Instrument PEI). 82 consecutive consultations were recorded, analyzed with RIAS for verbal interaction, and had a high or low enablement outcome. Semi-structured interviews exploring both participants' perspectives were carried out, using the recording as a trigger, and analyzed thematically. Triangulation of this mixed methods data from patient, doctor and their interaction was viewed through the lens of Buber's dialogic philosophy.

Results: A "life of dialogue", on Buber's perspective is a fluid interplay moving from "I/It", to "I/Thou" interactions that require an awareness of engaging, and being engaged, as seen in this observational study. For enabling consultations, the interchange could be distinguished as patient-centered in terms of characteristics of verbal interaction.

In Buberian terms enabling interaction comes from "The Between" and so is dependent on the relational aspects of the interchange between patient and doctor. For enablement each participant experiences mutual presence, reciprocity, and recognition. In authentic interactions when both patient and doctor can mutually "turn" to each other, a "memorable common fruitfulness" is achieved, which patients can distinguish as the "mental movement" of enablement and not just the practical service outcome of receiving a prescription or referral as being enabling. Enablement is about getting to "enough time" with "my doctor" and with "my patient".

Implications: The pivotal role of recognizing each individual is seen in the value patients placed on personal tailoring of their consultations for enablement. This supports current ideas of optimizing patient-centered consulting, in mutual authenticity and presence as found in Buber's approach to optimizing living dialogue.

**58**
**Patient Active Participation in Clinical Interactions and Their Subsequent Quality of Life**

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Background: Higher levels of patient active participation in clinical interactions are generally associated with better short-term outcomes. Prior research finds that certain patient sociodemographic characteristics (e.g., race) are associated with participation levels; these levels can be increased through interventions (e.g., Question Prompt Lists (QPL)). However, such findings are limited because studies generally do not include Black patients; nor do they examine longer-term correlates of participation. We report preliminary findings on associations between Black patients' participation levels during an initial oncology treatment interaction and their quality of life (QOL) as cancer survivors two years later. Our research question was whether patients' level of active participation during a single clinical interaction provides unique "signals" about their subsequent QOL.

Methods: Participants were 25 Black patients with cancer who participated in a study testing the efficacy of two QPL interventions. Their initial clinical interaction was video-recorded and analyzed using four patient participation measures (overall active participation; specific participation behaviors (e.g., question asking); word count; and talk time). Scores were combined into a composite measure of participation. Eighteen to 24 months later, participants enrolled in a separate study of cancer survivorship. Participants completed the *General Fact* scale and five *PROMIS*

subscales. We examined associations between the composite participation measure and these QOL measures. General Estimating Equations that controlled for study arm and and patient educational level were used. Because of small sample size, statistical outliers were eliminated from analyses.

Findings: Analyses disclosed significant positive associations between patient participation and the *Fact General and Emotional Well-Being* subscales, and the *Promise* subscales for *Depression, Instrumental Social Support, Fatigue, and Pain Interference.* Patient educational level was also associated with several QOL measures but controlling for it did not affect the other associations.

Discussion: This is a preliminary study. Small sample size and study design preclude definitive conclusions about causal associations between participation and subsequent QOL. However, findings suggest that patients' active participation levels in clinical interactions may provide important unique signals about their QOL as survivors almost two years later. Thus, further studies of these associations with more control variables and larger sample sizes are warranted.

## 59
## Educating patients about medication harms: an exploratory study on provider-patient conversations

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Background: Deprescribing, the process of stopping an unnecessary or potential harmful medication, has been proposed for reducing polypharmacy and inappropriate use of medications. Patient involvement is essential to deprescribing. We explored whether receipt of a patient educational brochure prior to the healthcare provider (HCP)-patient encounter changed the content of deprescribing conversations with HCP.

Methods: This exploratory study enrolled 13 HCP working in three primary care practices in Montreal, Canada, and 24 patients aged 65 years and older who were chronic users ($\geq$3 months) of benzodiazepines (BZ) or proton pump inhibitors (PPI). Eligible patients were identified by the electronic medical record and invited to participate in the study. All HCP were given access to a short web-based training session on medication harms and deprescribing communication strategies. Patients received an evidence-based educational brochure on potential harms and benefits of their BZ or PPI prior to (Intervention, n=15) or after (Control, n=9) seeing their HCP. Patient-HCP conversations were audio recorded and coded using MEDICODE, a validated instrument to analyse content of verbal exchanges on medications and interactions, coded by dialogue and initiative. Qualitative analysis of these conversations was performed.

Findings: Patients were mostly women (67%) with a mean age of 74±6 years. 'Instructions for taking medication', 'main effect', 'adverse effects', 'attitude/emotions', 'adherence' and 'follow-up' were the main themes discussed relevant to deprescribing for BZ and PPI in both groups (Intervention and Control). The frequency of discussion of these themes varied less in the intervention (BZ: 33-67%, PPI: 2754%) than the control groups (BZ: 33-100%, PPI: 14-71%). For PPI users, the intervention resulted in a greater proportion of patient initiative (Intervention: 0-29%, Control: 0-17%) and dialogue (Intervention: 3-34%, Control: 0-24%). This pattern was not replicated in the BZ users (patient initiative: Intervention: 0-40%, Control: 0-67%; dialogue: Intervention: 0-50%, Control: 0-100%).

Discussion: Pre-education seems promising for improving patient participation in discussions with their HCP about deprescribing for PPI users. However, pre-education had a less marked effect on patient-HCP discussions for BZ users. One possible explanation is that the stakes related to deprescribing are perceived as higher for PPI (medical treatment) users than BZ (comfort treatment) users.

## 60
## Coding problematic understanding in patient-provider interactions

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Background: Especially in chronic care conditions, unsuccessful understanding is strongly associated with poorer adherence and worse self-management skills. The development of instruments for detecting, analyzing, and preventing misunderstanding is crucial for improving patient understanding and the quality of patient care. The purpose of this study is to provide a coding scheme for detecting different types and levels of problematic understanding based on linguistic evidence. We show how its use can provide suitable criteria for assessing **unsuccessful communication and detecting the interlocutors' awareness of potential communicative problems.**

Methods:

We identify different types of linguistic evidence leading to problematic understanding, developing a coding scheme. This scheme is used for coding transcripts of videotaped consultations with patients affected by diabetes mellitus type 2 (interrater reliability is strong: 99.1% of agreement;

**Krippendorff's α= 0.89). Statistical analysis is perform**ed to verify the relationship between interactional roles (patients or providers) and a) the frequency of misunderstandings; b) the awareness of the risk of potential misunderstandings.

Findings: The study included 46 consultations in Italian between 6 p**roviders and 13 patients. Patients' problematic understanding was detected to occur significantly more frequently than providers'** ($\chi2(1) = 101.964715$, p<0.001, $\varphi=0.074$). **The Wilcoxon Signed-Ranks test indicated that the patients' misunderstanding of providers' communication was significantly higher than providers' misunderstanding of patients' communication (Z= -**7.875615, p<0.001), with a medium effect size

(r= 0.44). Providers were also found to be significantly more aware of possible misunderstandings ($\chi2(1) =$ 93.066401, p<0.001, $\varphi=0.07$) and to tend to verify more frequently the correctness of their own interpretations ($\chi2(1) = 16.996668$, p<0.001, $\varphi=.03$).

Discussion: Previous works have recognized the importance of applying linguistic frameworks to understand how miscommunication occurs, and how to avoid it. By acknowledging a wider definition of problematic understanding, our coding scheme allows detecting different types of linguistic evidence that may lead to communication breakdowns and thus affect patient understanding, patient autonomy and quality of patient care. The coding scheme developed is shown to be a productive evidence-based tool for detecting problematic understanding, which can be used for developing and implementing linguistic strategies for preventing the risk of misunderstandings in healthcare communication.

**61**
**Person-centred communication in optometric consultations: a cross-sectional study**

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Background: In optometry, person-centred communication is essential to understand the **patients' visual needs**, provide patient information, and involve patients in decision making on vision correction and management of vision and ocular health. The aim of the study was to explore person-centred communication in optometric consultations.

Methods: The study had a cross-sectional design. The sample included 40 video-recorded patient-optometrist encounters, including 11 optometrists (6 female) and 40 patients (20 female). The mean age of the patients was 66 years (range 46-91 years). We defined person-centred communication by the nine dimensions of the Verona Patient-centred Communication Evaluation scale (VR-COPE).The nine dimensions were graded on a scale from 1 to 10 by two independent graders and consensus agreed for all 40 encounters. The data was analysed using standard statistical tests, a p-value of 0.05 was considered significant.

Findings: The mean sum score for person-centred communication was 71 (sd ± 8), ranging from 53-89. There was no statically significant difference in person-centred sum score between optometrists. Optometrists scored high on the dimensions related to: structuring the consultation 10 (sd±1), active listening 9 (sd±1), **patient's point of view 9** (sd±2), psychosocial impact of visual/ocular problem and psychosocial context 9 (sd±2), **patient's expectation 8** (sd±3), shared understanding and patient involvement in decision making 8 (sd±1) **and completion of patient's**

symptoms agenda 7 (sd±1). The scores related to patients' worries and emotional needs and the optometrists empathy and support were lower, 4 (sd±3) and 6 (sd±3), respectively.

Discussion: The findings in our study could reflect the nature of the optometric consultation, having a standard routine with a specific goal to alleviate visual and ocular problems, and therefore presenting high scores for dimensions related to eliciting and understanding the patient's agenda, the patient's perspective, and decision-making. The low scores for dimensions related to understanding the patient in a psychosocial context and showing empathy should be explored in future studies to provide insight to whether this is related to the context of the optometric consultation or the optometrists' attention to the patient as a person. This may have an implication for understanding communication in different health care settings.

## 62
## Medication related problems in diabetes patients: a qualitative study on patients' and pharmacy staff's strategies to deal with it.

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Background: Diabetes mellitus often involves comorbidities and complex medication regimens. This combination increases the risk for medication related problems and therapy failure, which worsens a patient's condition. Sufficient self-management, including appropriate medication management is an important factor for successful therapy. Patients need support to develop and maintain self-management skills. The pharmacist is one of the healthcare professionals who can provide this support. The aim of this study is to explore the medication related problems diabetes patients experience and how they seek support. We also explored how pharmacy staff identifies medication related problems and what kind of support they offered.

Methods: Qualitative interviews were conducted among 14 patients, 12 community pharmacists and 5 pharmacy technicians. An interview guide was used and interviews were conducted until saturation of the data was reached. All interviews have been audio-taped, transcribed, coded and thematically analysed. Coding was performed according to inductive and deductive coding methods with the software Atlas.ti 7.

Findings: Patients experienced problems with self-managing their medication in daily life, especially outside their home. They also expressed concerns about the use of medication at all. Important sources of information and support were relatives, peers and other healthcare professionals. Pharmacy staff was mainly consulted for practical questions and was less important to patients in discussing concerns. Pharmacy staff found it difficult to identify patients with medication related problems, especially in those with low health literacy skills. They reacted to alerts about non-adherence from the pharmacy computer system and sometimes their gut feeling. The main pharmacy activities consisted of providing a convenient medication refill service and adapting medication schemes to fit daily activities.

Discussion: Pharmacy staff were not actively seeking to identify diabetes patients with problems in self-management of their medication. Patients did not feel comfortable discussing medication concerns with pharmacy staff and sought support from others. Improving communication skills of pharmacy staff may be a first step to enable staff to identify patients with problems in medication self-management and address patients' concerns.

## 63
## eHealth for older patients. Key insights from ten years online health communication research in an aging population

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Background: Although the use of eHealth applications hold tremendous promise for supporting older patients (65+) in managing their disease, most online applications are not age-appropriate designed. The purpose of this paper is to give an overview of effective characteristics of eHealth applications for older people in terms of presentation of information, website functionalities and the use of preparatory tools.

Methods: The results of twenty articles originating from the OncoCommunicAging (OCA) research program and related studies on communication with older adults are synthesized. This includes fourteen experimental studies, four literature reviews and two usability studies. The main outcomes are website satisfaction, understanding/recall of information and informed decision making. These outcomes are important prerequisites for self-management and treatment adherence.

Results: Regarding the presentation of information, animations and videos are most effective in improving older patients' website satisfaction, recall and informed decision making, in particular when a first person perspective or a narrative format is used. Adding cognitive illustrations to written website information, i.e. illustrations that complement text to facilitate learning, increases satisfaction, recall and informed decision making, especially if the accompanying text is rather complex. If the goal is to support older patients to better understand health risk information, the graph format of a bar chart performs better than other graph formats in terms of preference and understanding. Regarding functionalities, tailoring of information is an effective strategy. Mode-tailoring, i.e. adapting the interventions' delivery mode to participants' learning styles and mode preferences, is a novel tailoring strategy that improves satisfaction and recall of older people. The use of preparatory tools, in particular question prompt lists (inexpensive communication tools consisting of a structured list of questions designed to encourage question asking during consultation) and decision aids (tools to help people participate in decisions that involve weighing the benefits and harms of treatment options often with scientific uncertainty) increases older patients' understanding, but also other outcomes such as risk perception and participation in decision making.

Discussion: This paper unravels ingredients of effective eHealth applications for older patients and their family members. The results can be used to optimize information processing and online information provision.

## 64
## Patients` attention seeking actions during mechanical ventilation: A qualitative study

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Background: An increasing number of patients on mechanical ventilation in intensive care units are conscious and non-sedated patients. These patients are temporarily unable to speak as the tube blocks their vocal cords. These communication difficulties has been described as a frustrating experience for patients and a challenge for healthcare providers. So far, professionals have been reported to be the main initiators of communication. Fewif any have studied how patients try to express themselves and the content of the patient initiated communication. The aim of this study was to explore the patterns of communication and interaction between mechanically ventilated patients and healthcare providers in intensive care units, with a special emphasis on patients initiative to communicate.

Methods:

A hermeneutical-phenomenological approach was applied in this study. Ten patients on mechanical ventilation were recruited, and a total of 60 healthcare providers were involved in the interaction with these patients. Video recordings were used as method for data collection, in total over 30 hours, with approximately three hours from each patient. The videos were transcribed for verbal and nonverbal actions. 58 situations in which the patients initiated communication were extracted and studied in depth by means of content analysis.

Findings: The content of patients` communicative actions was categorized into physiological, psychological and social domains, and to medical treatment. "The act of seeking attention without a voice" emerged as a central theme, four different patterns of actions were observed in establishing joint attention with providers: "immediately responded to," "delayed response or understanding," "intensified attempts" or "giving up."

Discussion: The findings showed that the patterns of communication are specific for patients on mechanical ventilation as they first have to establish joint attention with healthcare personnel, and then try to achieve a joint understanding. This process represented a challenge for the patients and also for the proffesionals involved. Critically ill patients may give up their attempts if they have to use a lot of energy in the communicative process. Communication skill training and education of healthcare providers and in a clinical settings should address this, in order to improve the quality of care.

**65**

**"For nothing else in the world I would do another specialty… but it's not easy."**
**The impact of chronic disease management on primary care doctors in Switzerland.**
**A qualitative study**

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Objective: To explore the impact of the patient's chronic disease(s) on their health provider.

Design: A qualitative approach was taken, with an interview guide with discussion topics related to Chronic Care Model, and included an open exploration of the practitioner's difficulties in the care of patients suffering from chronic diseases, strategies they implemented to face the mentioned difficulties, and their needs regarding how to improve care delivered. Semi-structured interviews were conducted and interviews were digitally recorded and transcribed verbatim. The research team read and analyzed 2 test interviews in order to create a coding scheme. The codes were triangulated among the research team to achieve a consensus on their validity for analysis through multiple iterative steps.

Setting: Geneva, one of Switzerland's 26 cantons characterized by a very diverse population, high density of doctors and the largest university teaching hospital of Switzerland. Interviews took place at participants' workplace.

Participants: General practitioners working in outpatient clinics either in individual practices or in a hospital setting. Purposive sampling was used to gain a wide diversity of views. Participants were recruited through an e-mail announcement informing every primary care practitioner in Geneva (private practices and Division of Primary Care Medicine at the HUG).

Results: Twenty interviews, 10 in each practice type, allowed for saturation to be reached. The following themes relevant to the impact of managing chronic diseases emerge around the issue of feeling powerless as a doctor; facing the patient's reality; guidelines versus the reality of the patient; time; and taking on the patient's burden.

Primary care practitioners face an emotional burden linked with their powerlessness and work conditions, but also to the empathetic bond with their patients and their circumstances. Doctors in our study seem poorly prepared for this emotional strain. Health system is also not facilitating this with time constraints and guidelines unsuitable for patient's reality.

Conclusions: Chronic disease and multi-morbidity management is a challenge for patients, general practitioners and the health system. Structural changes need to be implemented at different levels: medical education; health systems; adapted guidelines; and a context that favors the development of the therapeutic relationship.

**66**
**Tackling a problem that doesn't exit: The curious case of type 2 diabetes and work life**

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Background: Work is an important aspect of daily life. Work is also proven to represent a challenge for people with diabetes, with epidemiological studies highlighting high levels of work-related morbidity.

Statistical associations highlight the challenges of managing diabetes in the context of work-life, but there is less evidence about underlying mechanisms. This is especially true for type 2 diabetes. Our study focused on generating knowledge about how people with type 2 diabetes experience work life, how it impacts upon work ability and how the demands of work impact on diabetes management.

Method: Data were acquired in twelve individual interviews and three workshops (Participants = 18). Eligibility for participation were; of working age (25-65), diagnosed with type 2 diabetes whilst still active in the labour market and to have been in employment within the last five years.

Individual interviews were semi-structured and organized around a thematic question guide. The three workshops were organized in accordance with principles from 'Design Thinking'.

Findings:  All participants affirmed the importance of remaining in work in relation to well-being, and some believed that work structured their lives in a way which was supportive of diabetes management.

The challenging experiences which emerged in our study were congruent with studies examining work and type 1 diabetes. However, in contrast to people with type 1 diabetes, our participants were less inclined to acknowledge that diabetes impacted on their work lives. Some participants actively disassociated their experiences at work from their diabetes. Yet while explicit links between diabetes and work life were not always articulated, participants highlighted issues where the influence of diabetes could be inferred.

Discussion :  Disassociation of diabetes from other aspects of life has consequences. It limits perception of strains from balancing the demands of diabetes and work. Failure to perceive problems may delay remedial action.

Clinical guidelines and patient education courses for type 2 diabetes do not generally address the topic of work. If we strive to provide patient-centred care for people with type 2 diabetes we should do more to support apprehension and understanding of the condition in the context of everyday life, including work-life.


## 67
## Empowering patients towards self-management: the contribution of the Self-Determination Theory

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Background:  The question arises how patients' autonomy, responsibility and choice in the daily management of their chronic condition can be supported. According to the Self-Determination Theory (SDT), the care context can stimulate or hinder patients' daily condition management. In the SDT, a need-supportive care context is considered a crucial facet for patients' autonomy and responsibility.

Methods:  This study addressed: *(1)* the design and psychometric evaluation of a questionnaire capturing needsupportive versus need-thwarting practices in self-management support; *(2)* multicentre study within chronic care nurses (*N*=1133) to explore nurses' practices in supporting self-management and its person-related antecedents, by multilevel analyses.

Findings:  The vignette-based questionnaire demonstrated strong psychometric properties. Multidimensional scaling analyses indicated a two-dimensional configuration with practices differing in personcenteredness and directiveness, i.e. autonomy-supportive, structuring, controlling, or chaotic practice. Antecedents indicated that nurses who experienced autonomy, competence and relatedness in work context tended more to need-supportive care. In case nurses are likely to feel unsuccessful when patients fail in condition management, they tend towards a need-thwarting care.

Discussion:  This study allows nurses to gain a more precise insight in their nursing style and establish a needsupportive care climate, which in turn can empower patients living with a chronic illness.


## 68
## Randomized Controlled Trial of a Novel, Patient-Centered Model of Self-management Support for Older Adults with
## Asthma that Comprehensively Identifies and Addresses Barriers to Self-Management

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Background:  Older adults with asthma in the United States often experience poor outcomes from limited engagement in disease self-management. Clinicians typically have insufficient time to identify self-management

problems and offer effective counseling. Recognizing that self-management is affected by an array of sociodemographic, health, and cognitive factors, a multi-stakeholder group of researchers, patients, clinicians and social service organizations developed and tested a self-management support model that involves screening patients for asthma self-management barriers and tailoring interventions to address them.

Methods: We conducted a 3-arm randomized controlled trial of the Supporting Asthma self-Management Behaviors in older Adults (SAMBA) model of self-management support (n=395). Patients ages 60 and older with moderate persistent asthma were recruited from hospital and community-based primary care practices in New York City, and randomized to SAMBA services at home with a community health worker, in the clinic with a health coach, or usual care (UC). We compared performance of the 3 treatment arms at baseline, 6 and 12 months for the following measures: hospitalization, emergency department (ED) visit, Asthma Control Test (ACT), Asthma Quality of Life Questionnaire (AQLQ), Medication Adherence Rating Scale (MARS) for asthma controller medications, and inhaler technique using generalized linear models.

Findings: The mean age was 68 years, 15% were male, 57% Hispanic, and 30% non-Hispanic black. There were no significant differences in patient characteristics between treatment arms. At baseline, 87% reported poorly controlled asthma (ACT score <19). At 12 months, patients in the SAMBA home and clinic-based arms were less likely to have poor asthma control vs. UC (60%, 68% vs. 75%, omnibus p=.03) and home-based patients were less likely to have poor quality of life (36%, 47% vs. 47%; omnibus p=.05). Inhaler technique improved in patients in both active treatment arms vs. UC (omnibus p=.01). There were no significant differences between arms for hospitalizations, ED visits, and self-reported medication adherence.

Discussion: Patients randomized to the SAMBA model had better asthma control, quality of life, and inhaler technique compared to usual care patients. This new, patient-centered model has potential to serve as a template for highly tailored self-management support of patients with other chronic diseases.


## 69
## Connection between the sufficiency and usefulness of knowledge of CKD patients

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Background: Living with chronic kidney disease (CKD) is a long-term challenge and patients expect education and knowledge for taking care by themselves. This study was based on the idea of empowering patient education, now searched from the point of view of sufficiency and usefulness of patients' knowledge. Generally, sufficient and useful patient education can improve patients' decision making and outcomes of care.

Purpose: To analyze the sufficiency and usefulness of the knowledge of CKD patients and the potential connection between them.

Method: A descriptive study design was used. Sample consisted of 162 (=n) Finnish CKD patients, having either follow-ups in the dialysis unit or home dialysis. The data were collected with a structured questionnaire (33 structured items, 4-point Likert type scale: 1 = strongly disagree to 4 = strongly agree, and 9 background factors). Patients were asked to evaluate the sufficiency and usefulness of the knowledge received. Items consisted of six dimensions of empowering knowledge: biophysiological (9 items), functional (9), social (6), experiential (3), ethical (3) and financial (3). The data were analyzed statistically.

Result: Participants were 24-85 years old (mean 61). The majority were men (64%). Participants rated their subjective health to be 7.1 (scale 0–10). 70% were on dialysis. Almost all (94%) had received written education material and 79% had searched for the information by themselves.

CKD patients evaluated the knowledge to be mainly sufficient (mean 3.27, range 3.52-2.80) and mainly useful (mean 3.28, range 3.46-2.82). The most sufficient and also most useful dimension was biophysiological and the worst sufficient and useful was experiential dimension.

Sufficiency and usefulness were strongly connected with each other: Pearson correlation 0.88 (p <.0001). Correlation varied from 0.71 in biophysiological dimension (p <.0001) to 0.84 in ethical dimension (p <.0001).

There were no clear connection between background factors and knowledge sufficiency, usefulness and their connection.

Conclusion: This study showed the connection between the sufficiency and usefulness of the CKD patients´ knowledge. Thus, in the evaluation of educational practices, either or of these dimensions could be used. However, more research about the usefulness and the actual use of the knowledge is needed.

## 71
## What is patient-centered care as defined from the patient perspective?

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Background: Redesigning health and social care towards patient-centered care (PCC) is a topic on the political agenda in many countries. Various health care providers proclaim that they provide PCC. Even though several concepts of PCC exist, the concept remains diffuse. Additionally, existing models were either not developed in cooperation with patients or addressed only specific settings of care. Therefore, the aim of this study was to provide a comprehensive understanding of the attributes characterizing PCC from the **patients'** perspective.

Methods: Semi-structured individual interviews were conducted with patients suffering from at least one chronic disease, since they usually have experience with different care providers. Patients were recruited via newspaper advertisement, physician offices and nursing homes. Maximum variety sampling was used to represent different types of diseases, age groups, and personal life situations. The interviews were audiotaped, transcribed verbatim, and analyzed according to qualitative content analysis approach using MAXQDA. Coding schemes were developed deductively based on existing models of PCC and refined inductively through the analysis.

Findings: Until now, 8 patients with various diseases were interviewed. Most relevant characteristics of PCC as identified through the interviews relate to individual consultation and treatment situations. These include e.g., provision of effective care, trustful and empathic relationships, continuity of care, and shared development of coping strategies. Moreover, patients stressed the relevance of e.g., insurance companies, which themselves can provide patient-centered services and facilitate or hinder the provision of PCC. Self-help groups and institutions providing evidence-based health information were considered to be important actors for enabling PCC. The importance of different characteristics of PCC or actors varies between patients in particular in relation to the health problem at stake.

Discussion: Results illustrate that existing models of PCC include a variety of characteristics of PCC, but should be adapted as such that more actors are addressed including e.g., policy makers, insurance companies or self-help groups. In addition to the processes of care, providing effective care is a core element of PCC that is currently not emphasized sufficiently. The results provide starting points for health care redesign towards more patient-centered care.

## 72
## Conversational agents for patients with advance disease: intervention description and trial design

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Background: Although various interventions have been developed to address palliative care needs for patients with specific diseases, little has been done to address the overall quality of life for adults living with serious illness. This trial aims to test an easy to use technology platform to empower patients with chronic diseases in what is likely to be the last year of their life. The intervention consists of a tablet-based embodied conversational agent (ECA) for patients with advanced illnesses to provide the following functions: (1) symptom monitoring and medication counseling; (2) physical activity promotion; (3) stress reduction; (4) spiritual needs assessment and support; (5) advanced care planning; and (6) story telling module.

Methods: A randomized controlled trial is being utilized to compare usual care (UC) versus usual care plus the agent (UC+ECA) for patients 21 or older, with a life expectancy of < 1 year, from outpatient clinics at Boston Medical Center (BMC). Each subject is enrolled along with a caregiver. Baseline data is collected at the first meeting and monthly phone surveys are conducted for six months after enrollment for follow-up on quality of life issues and unexpected medical visits. Intervention subjects are encouraged to use the system daily for the six-months they are enrolled. Data alerts from the system are monitored by a study nurse, who communicates with members of the patient's care team when needed (e.g., symptom not well controlled, concern regarding a medication side effect). Control subjects also receive monthly phone calls.

Findings: To date, 14 of 300 patients have been enrolled in this project. Eight participants have received the tablet intervention and 6 control subjects have been enrolled. All participants are still actively enrolled and participating in the study. Interim system use and participant experience will be presented in April of 2018 at the Society of General Internal Medicine conference.

Discussion: We were able to successfully develop and evaluate an ECA interface with adult patients dealing with advanced illness.


## 73
## Communication Ethics, Privacy, and Patient-Targeted Googling

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Background:  In a context where regulation of private information is an essential part of patient care, physicians may find themselves in a paradoxical circumstance1. Using a ready resource such as Google may help these providers discover important information about a patient. Collecting information on a patient who has not volunteered it may create problems for both patient and physician. This preliminary investigation focuses on physicians' use of social media, specifically Googling practices with patients.

> RQ1:     How do physicians feel about Googling for patient care?

> RQ2:     How would they treat the Googled information?

> RQ3:     What changes in both medical education and organizational privacy practices do physicians envision to address ethics of patient care?

Methods: Twenty intensive qualitative interviews were conducted (13 medical school faculty; 7 residents) in a rural family medicine program. This preliminary study used qualitative methods and constant comparative analysis to identify themes2,3.

Findings: Preliminary findings suggest that physicians are as interested in protecting themselves as well as the privacy of their patients. Results from RQ1 note that physicians admitted to using a range of mediated communication to learn more about patients (e.g., drug databases). Physicians expressed a strong desire to keep their social media presence to a minimum protecting both the profession and themselves. Responses to RQ2 indicate that discovering information about patients helped physicians approach how they would deliver care— particularly when it came to personal safety. Finally, responses to RQ3 were wide-ranging. Issues arose concerning "ownership" of the Googled information, arguments about privacy rules, and the need for specific guidelines and policies.

Discussion: Overall, this preliminary study identifies some of the challenges faced by physicians navigating ways to effectively use advances in social media. There is a strong need to ensure clear guidelines to protect privacy for both the physician and the patient. Nevertheless, there is widespread use of social media to gather information about patients. Perhaps because physicians believe that social media plays an important role in patient care, they are interested in developing guidelines where both physician and patient can benefit.

## 74
## Who is missed? - reasons why patients decline participation in an intervention aiming to reduce re-hospitalization through increased patient activation.

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Background: Despite the world-wide interest in improving reducing re-hospitalization by increased patient activation there is limited knowledge on characteristics of patients that chose to decline participation in randomized controlled trials of support of activation.

Primary objective: The objective is to explore reasons to decline participation in an intervention using motivational interviewing to improve patient activation for persons with chronic obstructive pulmonary disease or heart failure by the time of hospital discharge.

Methods: This mixed-methods study uses data collected during 9 months in an ongoing randomized controlled trial. Data on age, gender, diagnosis and reasons to decline participation were collected for patients who were asked to participate but declined. Data on age, gender and diagnosis were analyzed for patients in the trial. Reasons to decline were analyzed using content analysis and the categories were used for the statistical analysis.

Findings: The odds for accepting participation decreased with age (beta -0.03, p=0.01). The main reasons to decline participation were having sufficient support (17.5%), no need of support (16%), being too ill (14.6%) and lack of time for illness related activities (14.2%).

Discussion: This study highlights that interventions aiming to reduce hospitalization usage by increased activation may need to involve patients early in their illness trajectory as age and illness burden reduce likelihood of participation in such trials.

## 75
## Cards to Promote a Language of Change

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Family physicians frequently treat patients with both emotional and physical health problems whose treatment involves the need to use techniques that will help them change their way of thinking and lifestyle. Cognitive

Behavioral Therapy (CBT) has been extensively researched and found effective for a range of health problems. An extensive research indicates that family physicians who went through brief CBT courses report that using elements of CBT in their practice increased satisfaction with their medical intervention and psychosocial approaches. Yet, the short time allotted for the medical encounter makes it difficult for them to make a structured intervention that will promote change.

We would like to suggest an innovative yet simple tool that can effectively enhance the use of behavioral cognitive elements in the medical encounter and improve the ability of family physicians to use language of change.

In order to do so we invented cards to strengthen physicians' ability to apply cognitive behavioral strategies with patients. The cards are written in 3 languages -Hebrew, Arabic, and English, and contain a single open question or a sentence with one request dealing with: lifestyle change, pain management, goal setting, and coping with chronic illness or emotional problems. The cards designed in different colors to each topic.

For Example:

Lifestyle (blue) - "What do you have to tell yourself in order to start change?"

Coping with chronic illness (green)- "Tell me your (non-medical) story of why your illness broke out ..."

Pain management (red) "What helps you to control your pain?"

The cards were given to 20 family medicine instructors to use in their clinic for two months. Prior to using the cards, the participants were asked to rate their skills, the ability to use those strategies and the sense of success by doing so.

After one and two months of using the cards, we asked them to rate those abilities again.

The curve of change demonstrated a consistent improvement in the physicians' sense of competence to help patients achieve their medical goals. The physicians also reported higher satisfaction with the medical intervention.


**76**
**Initiating and holding useful conversations about lifestyle behaviours in dental settings**

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Background:  Health behaviours such as smoking, sugar consumption and alcohol use are leading causes of oral health problems. Whilst healthcare professionals are encouraged to be involved in promoting good health, it is unknown how conversations around health and lifestyle behaviours occur within dental settings or the potential barriers (and solutions) to promoting effective behaviour change.

Methods:  A qualitative study investigated the experiences and views of a purposive sample of 32 patients and 15 dentists. Transcribed audio-recorded interviews were analysed thematically.

Findings:  Both sets of participants reported limitations in the extent to which behaviour change talk occurred during consultations. Dentists expressed ambivalence over their role in supporting patients to make health behaviour changes and how to initiate these conversations without damaging patient relationships. In contrast, patients welcomed the opportunity for dentists to facilitate behaviour change provided it was relevant to their oral health. Barriers to effective conversations include the clinical environment and staff confidence in effecting change.

Discussion:  There is a clear need for greater training for dentists in how to initiate effective conversations about health behaviours and implement behaviour change techniques within consultations. Communication training and patient-facing interventions should be tailored to the context of the dental setting.


**77**
**Professional vaccination counselling and risk-benefit perception in the uptake of different forms of vaccination in the German adult population.**

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Background: With the introduction of vaccines and the reduction of incidences of vaccine-preventable diseases, an increasing number of individuals have little or no experiences and knowledge of the risks of vaccine-preventable diseases. Therefore, professional vaccination counselling and knowledge about the risk- benefits of vaccination are core aspects in the prevention of vaccine-preventable diseases. In this study, we investigated the relevance of and interaction between professional vaccination counselling and risk-benefit perception of vaccination as determinants of different forms of vaccination (seasonal influenza, pertussis and tetanus) in Germany.

Method: We analysed data from the 'German Health Update' (GEDA12) telephone survey (n= 19 294), which were conducted between 2012 and 2013, and were representative of the general population aged ≥18 years living in Germany. Stepwise logistic regression modeling was employed analyzing the association of and interaction between professional vaccination counselling and risk-benefit perception of vaccination with vaccine uptake against seasonal influenza, pertussis and tetanus. All models were controlled for key-determinants of vaccination (age, chronic diseases, socio-economic status, gender, work field, health behaviours and family status).

Results: We found significant associations between vaccination counselling and risk-benefit perception of vaccination with vaccine uptake against seasonal influenza, pertussis and tetanus. Interaction effects between vaccination counselling and risk-benefit perception indicate that those individuals who receive a professional vaccination counselling and perceive vaccination as beneficial have higher odds of vaccine uptake against seasonal influenza, pertussis and tetanus.

Conclusion: This study emphasizes the importance of professional vaccination counselling in the communication of the risks and benefits of vaccination, and in vaccine uptake against different forms of vaccine-preventable diseases.

**78**
**Facilitation of group-based, person-centered diabetes self-management education: Healthcare professionals' implementation of new approaches**

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Background: Healthcare professionals' (HCPs) person-centered communication skills are pivotal for delivering successful diabetes self-management education (DSME). Many HCPs favor person-centeredness as a concept but implementation in practice remains challenging. Today, programs have often a fixed curriculum dominated by biomedical issues. Most person-centered methods are developed targeting individual consultations, although group-based DSME is a widespread and efficient method of support. Person-centeredness in group-based DSME requires a change in practice towards addressing biopsychosocial issues and facilitating group processes. The aim of this study was to explore how HCPs implement new methods to facilitate person-centeredness in group-based DSMS.

Methods: The study was guided by action research and divided into three phases (investigation, development, and pilot) using a variety of qualitative methods. In step one; observations were conducted across five educational settings including 49 persons with T2DM and 13 HCPs to explore HCPs' person-centered skills. Observations were supplemented by interviews (n=12) and two focus groups (n=16) with group participants, as well as interviews (n=5) with HCPs. In step two; 14 HCPs collaborated in two workshops to develop new methods e.g. exercises and dialog tools to prompt discussions about psychosocial aspects of diabetes and to fit educational needs to the group. In step three, we pilot-tested the methods using observations in three settings and interviewed 5 HCPs and 27 participants with T2DM. A final workshop was conducted to evaluate the methods. Systematic text condensation and hermeneutic analysis were used to analyze data.

Results: Implementation of the methods was characterized by three categories. Some HCPs chose not to implement the methods because they conflicted with their usual practice relying on the biomedical model. Other HCPs incorporated approaches with a biopsychosocial focus but was unable to structure the process, leaving participants uncertain about the aim. Finally, one setting succeeded with implementation, tailoring content and processes to group participants' needs, and promoted reflections and discussions in the group.

Discussion: Implementing methods to deliver person-centeredness is complex and more attention should be paid to systematic training of HCPs. The training should be structured stepwise incorporating techniques directed towards existing skills including ample time to train and reiterate skills.

## 79
## Evaluation of a smoking cessation programme based on psychological coaching

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Background: Some behaviours have a high negative impact on health (e.g., use of tobacco, alcohol and other psychoactive drugs). Psychological coaching could be an effective approach to change behaviours with a negative impact on health or a ground of techniques and strategies to do so. This study is an evaluation of a smoking cessation programme whose development was based in psychological coaching.

Methods: The smoking cessation programme was implemented by a team of psychologists and medical doctors, in a company, at workplace, with three levels of intervention: individual, group and organizational. To evaluate the programme, a questionnaire was applied to all the 520 company members one year after its beginning [n=385 (74%) replayed] and another questionnaire was applied to the participants in the group smoking cessation programme (n=38).

Findings: The smokers' rate in the company decreased from 38% to 30%. At company level, among smokers, 64% reduced the number of cigarettes smoked (T1:M=19, SD=9.2; T2:M=15, SD=7.7; p<0,000). Among smokers enrolled in the group cessation programme (N=38), 22 (58%) were abstinent six months after quitting.

Discussion: Psychological health coaching developed at organizational level could be an interesting approach to change health relevant behaviour like smoking. Effectiveness of interventions to change these behaviours depends on the strategies adopted and on the implementing context.

## 80
## Empathy in Clinical Communication: a Scoping Review

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Background: In a medical practice with an ever-increasing level of technology, empathy is an important factor to improve the quality of clinical communication and healthcare, therapeutic efficacy and improving humanisation in health services.

Method: Pubmed database scoping review. The word "empathy" was used to search articles that titled it. After an evaluation, articles referring to empathy in clinical communication and how to improve it, were selected. The remaining were excluded because they lacked direct relation to empathy in healthcare practice, referred to versions validated in different countries or didn´t have abstract.

Findings: Searching "empathy[Title]" in PubMed we get 3038 results, the oldest from 1946, 71 years ago. More than ½ are from the last 10 years and around 43% from the last 5. It's clear that this is a subject that only recently has gained attention, when it should have had it for far longer.

It's a common finding in different studies that empathy is associated with improved patient satisfaction, increased adherence to treatment, less physical and psychological pain and results in an overall better health; it is also usual to find studies showing the decreasing levels of empathy in the course of medical education. There is an increasing effort in relating empathy and burnout, having different outcomes, and in the creation of interventions to improve empathy.

Discussion: As doctors we take the Hippocratic Oath, swearing to treat the sick and to mean no harm. In an era where mental health and its correlation to physical health is recognized, empathy, being the basis of a proper communication, is a very important matter to take into account in medical practice, especially with the technological outbreak.

Medical education is more scientific based than humanistic approached which makes medical students more tough and insensitive to the problems of patients. Effectiveness of teaching patient-centered approach and empathy skills in medical education needs to be improved.

## 81
## Emotions in oncology consultations - A conversation analytic approach of doctor-patient interaction

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Cancer patients may experience a range of worries and concerns, related to the diagnosis, treatment options, prognosis, as well as psychosocial issues. Oncology consultations are perceived as stressful and challenging both for the patient and the oncologist. Patients often hesitate to introduce emotional topics, and doctors may vary in their response when patients address their worries.

We applied Conversational Analysis to study how emotional topics were introduced and responded to in doctor-patient consultations in oncology. Data included transcripts of audio recordings from 31 primary consultations between oncologists and patients at an oncology outpatient clinic. Sequences including emotional topics were selected from 7 of the 31 consultations.

We identified some characteristic pattern in how emotional topics were addressed and responded to in these clinical consultations. Emotional topics were rarely addressed, and typically only when explicitly introduced by the doctor. Openings sequences with the doctor´s greeting "How are things going" invited patients to emotional expressions, and provided empathic opportunities in the following sequences.

Emotions were picked up and responded to by the doctor when explicitly expressed by the patient, and less so when the patient gave implicit hints or suggestions. When doctors failed to respond to patients' initiative on such issues, or changed subjects, patients rarely reintroduced worries or emotional concerns. Some patients withdraw and downplayed their emotions and worries when the doctor provided space and invited to explore the emotions. Sequences of doctor-patient interactions on emotional topics will be presented and discussed. The findings illustrates the complex interactions involved in doctorpatient negotiating emotional topics, and emphasizes the importance of doctors' initiative and awareness of emotional topics in cancer care.

## 82
## Nurses´ Experiences with Confirming Communication in Patient Communication - an Intervention Study

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Background:  The study primary objective consisted of two parts aimed: To evaluate nurses´ initiating and responding to patients´ cues and concerns before and after an intervention, and to describe the nurses´ experiences with the communication model. A one-day communication course was developed based upon simulation-learning method. The intervention consisted of learning a confirming communication skills model developed for postoperative setting.

The research questions were:

1) To what extent do nurses initiate ques and concerns before and after a communication course?

2) What responses do the nurses give to the patient´s ques and concerns before and after a communication course?

3) How do nurses experience the communication model to discover the patient´s ques and concerns before and after a communication course?

Methods: The design was quasi-experimental "one-group pre- and post-test" and qualitative descriptive. Nineteen critical care nurses and registered nurses were involved from six different postoperative care units in Norway. The data consisted of 38 video-recordings of simulated "nurse-patient dialogues", from pre-test and post-test and 19

audio recordings from individually interviews after post-test. The video-recordings were encoded with the "Verona Coding Definitions of Emotional Sequences". The audio-recordings were analysed with inductive qualitative manifest content analysis.

Findings:  Nurses initiated significantly more cues and concerns at post-test, and reduced significantly the use of the response "reduce room" at post-test. Nurses experiences of the intervention and use of the communication model emerged in three manifest categories; Quality improvement in dialogue with the patient; Experiences in lack of competence; Contribution to own management and competence development.

Discussion:  The communication course with the confirming communication model learned through simulation-learning method offer a promising method to enhance initiating and responding to patients´ cues and concerns. Nurses experienced the model as suitable, but challenging. The results indicated that education, knowledge, attitudes and training could be important in raising the skills and improving the quality of communication with patients. However, a one-day course may not be enough and further communication training may be needed. Further studies are needed with greater range to enhance the transferability.

## 83
## Positive emotion in health care communication – A Realist Review

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Background:  While the expression of positive emotions through communication has been studied in interpersonal psychology, it is surprising that it has been largely overlooked in the field of health care communication. Given the **potential for clinicians to promote and support positive emotions in the response to a patient's** chronic illness, as a first step, it is important to create a map of existing literature in terms of its nature, features and volume. The aim of this project is to explore how focusing on positive emotions can contribute to older peoples´ health and well-being in general and more specifically how it might influence the relationship with health care personnel.

Method:  We are currently mapping the literature by conducting a realist review. The realist review has specified methods for dealing with the complexity of research, such as influence of context and heterogeneity. The first step is to formulate the review question and articulate key candidate theories to be explored. Searches were performed in Cinahl, Medline, PsychInfo, and Scopus by a librarian, and screening and confirming publications was done by an international research team. Step two is synthesising data retrieved, to achieve refinement of programme theory – that is, to determine what works for whom, how and under what circumstances. Several CMO-configurations about Context (C), Mechanisms (M) and Outcome formed the basis for the analysis of the papers identified.

Findings:  Final search gave 3165 publications, and we are currently in the process of screening these. Preliminary findings indicate that humour is the topic most often studied in relation to positive emotions. The mechanism of humour was to cope with different situations by offering a moment of rest, and this was a mechanism both for patients and healthcare personnel. Further analysis will determine if this is a consistent trend. Final analysis will be completed by Summer 2018.

Discussion:  Less attention is given to the role of positive emotions in health care communication as opposed to negative emotions. Our mapping of existing literature will both help us understand more in depth the role positive emotions play in communication as well as guide directions for further research.

## 84
## Predictors of clinician response to patients' expressed emotional needs

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Background: Emotional support is essential to good communication, yet studies show that clinicians commonly miss opportunities to provide empathic responses to patients' emotional cues and concerns. Our study explores the nature and predictors of clinician responses to the emotional issues raised by patients new to HIV care.

Methods: We consented and enrolled 19 HIV clinicians and 43 English-speaking adult patients new to HIV care at an urban academic medical center. Patients were eligible to be recorded up to three times within the first year of their enrollment. Encounters were audio-recorded, transcribed, and coded using the Verona Coding Definitions of Emotional Sequences (VRCoDES). We categorized the intensity of patient expression (subtle 'cues' vs. more explicit 'concerns'), content of the cue/concern (medical vs. non-medical), and timing of the cue/concern (earlier vs. later). We also categorized clinician responses (e.g. providing vs. reducing space). We used random intercepts multi-level logistic regression to assess the associations between types of patient cues/concerns with provider responses.

Findings: Of 91 encounters, 65 (71%) contained at least one patient cue or concern (range 1-16) with a total of 250 cues/concerns. About half (130/250) of the cues/concerns were medically-related (e.g. HIV symptoms and treatment) while the remainder were related to the patients' non-medical life circumstances (e.g. health of family members, financial strain). Patients more frequently expressed cues (n=184, 74%) than concerns (n=66, 26%). Clinicians more commonly responded by providing (n=204, 82%) rather than reducing (n=46, 18%) space for talking about emotional issues. However, clinicians were less likely to provide space when the cue/concern was medically-related (OR 0.36; 95%CI 0.17-0.77) and for subsequent vs. initial cues/concerns (OR 0.32; 95%CI 0.14-0.77). Clinicians were more likely to focus specifically on patient emotion when patients stated concerns in comparison to cues (OR 4.55; 95%CI 1.36-15.2).

Conclusions: Newly-enrolled HIV patients express subtle cues more often than explicit concerns. Unfortunately, clinicians express empathy less often for cues than concerns. They provide less space for medically-related emotions and those that are repeated. Further research should explore how clinicians' responses impact patients, and how clinicians can best balance efficiency and effectiveness in emotional support.

## 85
## Type 1 diabetes women's views about preconception care- a qualitative study

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Background: Pregnancy in women with Type 1 diabetes mellitus (T1DM) is associated with increased complications for both baby and mother; such complications can be reduced with careful pregnancy planning. Preconception care (PCC) enhances pregnancy outcomes by helping women to optimise their glycaemic control, through supportive intervention. However, despite these benefits the uptake and adherence to PCC is low. This qualitative study aimed to generate a better understanding as to why women may not utilise PCC, by eliciting the views and experiences of women with T1DM in relation to preconception care.

Methods/Sample: A sample of six women of reproductive age with T1DM undertook semistructured interviews exploring their views on PCC. These interviews were tape-recorded, transcribed (verbatim) and analysed using interpretative phenomenological analysis (IPA) to elicit themes that explicated the women's orientation and behaviour in relation to PCC.

Findings: The analysis identified five key themes: the fear of complications (both for the mother and baby); the style of communication from health care professionals (HCPs); the support of significant other's; personal autonomy; and women's beliefs about PCC.

Discussion: Overall the findings suggest that women's uptake of and engagement with PCC is enhanced when HCPs adopt a supportive and positive approach, which addresses their anxieties in pregnancy preparation and encourages the health behaviours necessary for a good outcome for their baby.

## 86
## GOSTO! Training the trainers - A programme to prevent type 2 diabetes

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Background: Diabetes primary prevention is considered fundamental, because diabetes prevalence rates are increasing and represent a threat to health services sustainability. Education for Health is a priority of healthcare and contributes for health promotion and diabetes prevention, as shown by the results of multiple meta-analyses of educational studies.

The programme objective is to train the trainers – health care professionals – to help people with moderate and high risk to develop type 2 Diabetes (DM2) to improve their lifestyles relating to nutrition and physical activity.

Methods: Primary care nurses are trained to guide the GOSTO! Programme, which is composed by 7 group education sessions (2 hours each) along 12months with people with moderate and high risk to develop DM2. The training the trainer sessions are developed in *b-learning*: 4 e-learning hours and a 6 hour presential session. Presential training includes role-plays of group education sessions. The nurses are trained to use dynamic methodologies, including Motivational Interviewing (MI) and Change Behaviour Model (CBM), providing an **interactive learning based on participants' experiences and behaviour change choices about nutrition and physical** activity. Participants reflect about their motivation to behaviour change, define their smart objectives, action plans and strategies to deal with setbacks.

Findings: Nurses' training occurred since November 2016 until December 2017 and involved 470 nurses from different Portugal regions. These nurses rated the b-learning training as Very Good or Good: global - 93%, contents - 90% and trainers' motivation capacities/competences - 93%. Nurses considered they acquired capacities to manage group sessions.

Discussion: The investment in nurses' training with the GOSTO! programme will facilitate the involvement and proximity among moderate/ high risk of DM2 people and healthcare professionals. Moreover, the impact of peer sharing allows better self-confident performances, autonomy and wellbeing.

The improvement of healthy lifestyles relating to nutrition and physical activity in people with moderate and high risk to develop DM2 can have positive results because the participants may lost weight and abdominal perimeter and prevent DM2.

Previous national programmes, such as "Together it´s easier" highlighted and promoted the importance of active methods such as MI and CBM as fundamental tools in group education.


## 87
## The implementation of a communication workshop to address ACGME interpersonal and communication competencies

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Background: Over the past decade, there has been an increased emphasis on quality metrics and competency assessment in healthcare. With the advent of the Next Accreditation System (NAS), assessment is imperative to meet ACGME requirements. The ACGME defined six physician in training competencies, which required programs to investigate evaluative measures. One such competency requiring evaluative measures was interpersonal and communication skills.

Methods: Due to the lack of evidence around effective evaluative measures for interpersonal and communication skills, one program set up a quality improvement study for their fellows in training. The curricular intervention was

created in conjunction with the Academy of Communication in Healthcare; The ART of Communication Workshop (ARToC). The first step in the process was identification of anonymous raters for the quality improvement evaluation. Supervisors chose specific allied health professionals due to their frequent professional interactions with the fellows. Professionals came from front desk staff, ICU staff, as well as procedure suite staff. While identification of raters was being conducted, an evaluation tool based on the workshop content was developed. Once raters were identified, they participated in the ARToC workshop just like the fellows but also received training on utilizing the rating tool post workshop. The rating team was briefed on the assessment tool (quantifiable tool) after their workshop in order to evaluate fellow's interpersonal and communication skills based on the specific behaviors presented in the ARToC workshop. Raters were then asked to use the tool in determining fellows' baseline behavior. Following the baseline period, fellows participated in the communication training. After fellows completed the process, the raters evaluated their skills from 2-6 weeks post the training to see if the intervention truly did have a quantifiable effect on trainee behavior.

Outcomes: Findings regarding fellows' behavior pre and post workshop data will be presented. Additionally, data from debrief sessions with raters and fellows about perceptions around the training, assessment, and effectiveness will be shared. Finally, leadership will share lessons learned in the process that may not be quantifiable or were discovered in the debrief data.

## 88
## Translation and cultural adaption of the Communication Assessment Tool (CAT), developing a Danish and Norwegian version.

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Background: The Communication Assessment Tool (CAT) is a widely used survey for measuring patients' perspectives on clinicians' communication skills, but has not yet been translated into the Scandinavian languages. Despite their languages are closely related, substantial differences may occur when questionnaires are independently translated and therefore the aims for this study were to translate, validate and psychometrically test the 14-item survey into Norwegian and Danish, making them as similar as possible.

Method: This was a translation and validation study including individual interviews for content and face validity, and a patient survey with 440 participants from a Danish hospital and a Norwegian general practice for testing psychometric properties.

Results: Despite minor differences in the use of words in the translated versions of CAT, the final versions were very similar. Based on the content and face validation and after agreement with the developers, it was decided to include a 'non-applicable' answering option, which was not a part of the original version. The use of 'non-applicable' for each item ranged from 0%-30% in Norway and from 0%-6.1% in Denmark. The CAT had excellent internal consistency with a Cronbach's alfa of 0.971 in Denmark and 0.938 in Norway. The overall CAT score, i.e. items rated excellent, were 55.5% in Norway and 50.3% in Denmark. For each item, the CAT score ranged between 31.3%-69.8% in Norway and 33.7%-57.4% in Denmark. Item 2 'Treated me with respect' received the highest score in both countries.

Conclusion: The cross language translated and validated CAT can be used to measure patients' perspectives on clinicians' communication skills in both Denmark and Norway and despite minor differences in wording, the CATs are very similar and is thus well suited for comparative studies.

## 89
## Students and Patients Perception on Relational Skills after History Taking and Physical Exam Training.

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Background: When communication skills (CS) are taught to medical students, two aspects seem to influence its effectiveness: performing this teaching in the context of clinical challenges and using experiential teaching methodologies. The history taking and physical exam are introduced to our students in the 3rd year of medicine (Fifth semester) along with basic CS. The main purposes of introducing CS are to establish a good relationship with the patient and facilitate the performance of those tasks during the interaction. This study explores the perception of students and simulated patients about basic doctor-patient relationship.

Methods:  One hundred and eleven students received training in history taking, physical exam and basic communication skills. The **teaching methodology used was mainly "experiential": first students attended interactive** lectures, later they interviewed three Standardized Patients (SP) with diverse medical problems; after each encounter students watched their interviews and carried out a self-evaluation (check-list) on the contents of the history, physical exam and communication skills. The students discussed these experiences in small groups workshops. Students gave also their perception about the degree of comfort perceived in the interviews.

Findings:  All students completed the self-assessment and were evaluated by the PS after each of the three encounters, but only 41 students answered about their confort after the encounters.

Self-assessment (percentaje of items filled out): Introduction and relationship building, 1st Encounter (1E): 80.5%; 3th encounter (3E): 95.6% (p <0.001); patient perspective (life impact): 1E: non available, 3E: 78%;  patient concern: 1E: non available, 3E:79%; Closing interview : 1E: 72.2% 3E: 84.5% (p <0.001)

SP encounter perception: Relationship & Respect: 1E: 67.6%; 3E: 89,2%. Student interest and concern: 1E: 26%; 3E: 46.9%.

Degree of comfort perceived by the student in the meetings: 4.4 (rating scale 1-6)

Discussion: After a training program that integrates history taking, physical exam and CS, both the students self-assessment on some CS and SP encounter perception, improves significantly along the interviews. Others CS have acceptable levels in the last interview. Further research is needed to determine to what extent the CS improvement has an impact on skills for history taking and physical exam.

**90**
**Core Communication skills in the medical students of University of Beira Interior (UBI): evaluation and curriculum' review**

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Background: The primary purpose of the six academic years in Medicine is to provide students with a set of knowledge and skills to pursue medical practice in an efficient and safety friendly manner. These skills tend to be increasingly needed to an appropriate clinical communication that fits contexts and people, with positive effects on **the quality of clinical practice and on users' and health professionals' satisfaction. It is essential that doctors can** interact in the clinical interview, gathering useful information and motivating towards the fulfillment of therapy and behavioral changes that are needed to achieve the best results.

Main Objectives: 1) Descriptional analysis of the self-assessment clinical communication core competencies of the students of the 5th and 6th year enrolled in the medical school of UBI 2011-2012 school year; 2) Analysis of the curriculum of UBI medical course, identifying the strengths and weaknesses of the training on clinic communication.

Methods: This research is observational and descriptive. A total of 105 students, with an average of 24.1 years of age, in the 5th and 6th years of the Master of Medicine UBI, enrolled in the academic year 2011-2012, participated in this study. The statistical analysis was performed using the SPSS ® (Statistical Package for Social Science) version 19.0. Due to the lack of normal distribution of data, non-parametric tests were performed to compare samples, considering results as significant as p <0.05. A review of the syllabus of the course related to communication skills and interviews with the teachers responsible for teaching these units were also conducted.

Discussion: Surveyed students recognize the importance of communication skills in medical practice. They recognize also that UBI teaches the key clinical communication and interview skills. They feel well prepared for the

exercise of these skills. The results indicate the communication of bad news and the ability to deal with complaints as areas for improvement in the teaching of clinical communication skills in the medical course of UBI.

**91**

**Recording communication teaching sessions: developing a flexible, cost-effective technological solution.**

**Martin Armer, Lancaster Medical School**

Background:  Teaching effective healthcare communication is recognised as integral to the education of future clinicians. Many schools use simulated patients to offer a safe space for learners to practice and develop their communication. Communication sessions are relatively expensive to provide, making it vital that students have the maximum opportunity to learn from them.

- The challenges we faced were:

- A loss of Audio-Visual support staff

- The need to replace aging digital video cameras.

- Poor sound quality on video recordings

- Students previously had limited access to recordings.

In response to these challenges, and changes in curriculum and teaching spaces, called for a system that could be moved between teaching spaces.  Any system must be easy for different tutors to access without training.

Methods:  This approach uses iPads (or smart phones), as teachers were already familiar with this technology.  iPads are tripod mounted. Inexpensive, twin lavalier microphones capture both learner and simulated patient in superior sound quality, and with less background noise, than the omnidirectional built-in device microphone. TRRS inputs allow audio to be recorded on iPads. Once recorded, videos are wirelessly uploaded to cloud-based storage systems.  Access to videos can be controlled to allow individual learners, designated groups or open-access. Students can log in to view their videos anytime, on or off.

Findings:  A system has been developed to be relatively low cost, easy to use, flexible, highly portable, whilst offering learners unrestricted access to view their videos.

Feedback from tutors has been universally positive, regarding the ease of use. Minimal training was required, reducing the administrative burden.

Students have been able to access their videos for private study between sessions and prior to clinical examinations (OSCEs).

The audio and video quality has much improved over digital camcorders.

The equipment has been used to make other educational videos, including examiner training, increasing it's cost-effectiveness.

Discussion:  This presentation provides an example of a flexible, simple and cost-effective model for capturing and sharing communication-teaching sessions with learners. Sharing our experience is intended to help other institutions consider ways to use everyday technology to solve their own particular audio-visual recording challenges.

**92**

**The impact of an end-of-life communication workshop: A pre-post interventional study**

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Background:  Studies have demonstrated medical education insufficiently prepares physicians to lead end-of-life discussions. Experiential learning workshops have shown to improve communication skills; however, the impact of a single session is unknown. The primary aim is to evaluate the feasibility of a two-hour experiential learning

workshop (ELW). Secondary aim is to evaluate the impact on communication skills and comfort level in leading discussions. We hypothesize a two-hour workshop to enhance communication is feasible.

Methods: We conducted a pilot pre-post intervention, prospective observational study to determine feasibility of a two-hour ELW. We recruited pulmonary & critical care fellows at a tertiary care academic medical center. First, a pre-intervention consisted of a standardized patient encounter in which fellows provided a medical update, broke bad news, and discussed goals of care for a fictitious case. Second, a 30-minute evidence-based didactic lecture on effective communication was delivered by palliative care faculty. Third, fellows repeated the standardized patient encounter with a different surrogate. Trained observers monitored the encounters remotely and completed a checklist of key items. The fellows completed pre- and post-workshop surveys regarding comfort level with communication.

Findings: Eleven of 14 pulmonary & critical care fellows were recruited. All completed the workshop in two hours and standardized patient encounters were uniformly observed. Improvement was observed in eight of 14 checklist items: (1) not checking devices, (2) **introducing self, (3) asking for permission to provide information, (4) "warning shot" before bad news, (5) avoiding medical jargon, (6) silence after breaking bad news, (7) responding with** empathy, and (8) inquiring about the goals of care. Fellow survey results demonstrated an improvement in comfort level with breaking bad news (pre score 4.64 versus post score of 5.10 on a 6 point scale) and leading a goals of care discussion (4.27 versus 4.72 on a 6 point scale).

Discussion: Our two-hour ELW was feasible and improved communication skills and comfort levels. Limitations included small sample size and use of a single case. Our ELW design can be extrapolated to evaluate its effectiveness in enhancing communication on medical students, physician residents, and physician faculty.


**93**
**Exploring training needs of healthcare professionals in a European border region**

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Background: In the Euregion Meuse-Rhine (EMR), where three countries meet, patients crossing borders for healthcare occurs regularly. This results in international patient handovers. International patient handover is assumed to be increasingly complex compared to national handover due to language barriers, cultural barriers, differences in healthcare systems and unfamiliarity with other teams (Groene et al., 2009; Jabakhanji et al., 2015). Provision of handover training addressing specific needs of healthcare professionals in border areas may be **beneficial. Since professionals' needs are yet to be investigated, the aim of this study is to investigate healthcare professionals' training needs regarding cross-**border patient handover.

Methods: We performed an exploratory survey study. A survey concerning patient handover was composed by research partners in the EMR. Items addressing current status and needs for training were included. The survey was sent to healthcare professionals (doctors, nurses, ambulances etc.) in several healthcare institutions in the EMR. Surveys were spread by research partners in the EMR. Data were collected digitally and anonymized automatically. We included all healthcare professionals working at a healthcare institution in the EMR for at least six months. Data were analyzed in an explorative manner with IBM SPSS Statistics.

Findings: Of the 864 healthcare professionals who responded to the survey, 30% reported to be involved in at least one cross-border handover in the last month. Of those who were involved in cross-border handover, 85.4% (217) reported there was no special attention for this topic in continuing education. 14.6% (37) reported attention for this topic, however frequently mentioning topics not specifically aimed at international handover. When asking what is needed to optimize international handover, language courses, training standardized communication and joined training were suggested.

Discussion: In settings where cross-border handover is a frequent event, little curriculum is dedicated specifically to cross-border patient handover. Joined training aimed at standardizing processes should be offered in such settings. This will facilitate a shared understanding of the process of cross-border handovers. It is important to further investigate training needs in settings in which frequent and/or systematic cross-border handover occurs.

**94**
**Difficult Conversations: Realistic preparation for student clinical learning**

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Background: When and how learners are introduced to bad news telling skills is unclear. Simulations often ask students to pretend to be qualified physicians as they are more likely to deliver bad news. This can be perceived as temporally removed from what students may experience more immediately during clinical training. To address this we recently rewrote our bad news cases to more realistically reflect the types of difficult conversations students are likely to engage in during clinical training.

Methods: Each student gets observed practice of a difficult conversation with a simulated patient followed by feedback and re-practice. They observe 4 other students enact cases and engage in discussion with a faculty facilitator. Using this "just in time" learning perspective, new cases included two hospital based scenarios where the student enters the room and talks to the patient or family member shortly after they have received difficult news.

Evaluation included numerical rating scales of the effectiveness of the module and open ended questions evaluating facilitator performance and the realism and contribution of simulated patients to their learning. Mean numerical ratings from 2013-2015 were compared to those after implementing new scenarios (2016-2018). Open ended comments were analyzed using Nvivo to identify salient themes in learner comments in relation to specific scenarios as well as overall learning.

Findings: Numerical ratings of the module maintained high ratings after change in scenarios with no statistical differences (2013 at 4.80, 2014 at 4.78 and 2015 at 4.79 vs 2016 at 4.88, 2017 at 4.74 and 2018 at 4.68). Overall narrative comments continued to be consistently positive in relation to the value of all components of the educational module. There was also a marked decrease in complaints about a lack of realism in scenarios and increase in statements anticipating very similar encounters as students during clinical rotations.

Discussion: Moving difficult conversations to an earlier period of time in training as well as altering the scenarios had no effect on student's perception of quality and improved perceptions of applicability to students' immediate clinical experiences. Next steps will assess student's application of this learning to clinical practice.

**96**
**Tracing the discursive development of rapport in a nurse-patient interaction: a case study approach**

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Background: Effective communication skills form an important platform for building good nurse-patient relationships, with rapport being a core tenet that underpins effective and compassionate nursing care. However, many forms of communication barriers can undermine the building of rapport. With increasing cultural diversity among nurses and patients in Australia, there are concerns regarding differences in language and culture that can cause misunderstandings which can have serious impacts on health outcomes and patient safety (Hamilton & Woodward-Kron, 2010). In this project, naturally occurring intercultural nurse-patient interactions are explored and analysed from a sociolinguistic perspective.

Methods: Interactions between registered nurses from culturally and linguistically diverse (CALD) backgrounds with patients in a hospital setting are explored through interviews, audio recordings and participant observations, and analysed using interactional sociolinguistic (IS) and theme oriented discourse analytic methods.

Findings: Themes of 'rapport-building', 'display of empathy' and 'provision of patient education' are identified throughout the course of the participants' nursing care. This presentation adopts a case study approach focusing on rapport building, demonstrating how rapport is accomplished by one of the RN's. The way this particular RN builds rapport with her patient is demonstrated, highlighting strategies that are interwoven through her clinical care to achieve socio-relational and clinical goals.

Discussion: This presentation demonstrates how rapport is accomplished by one of the participants. Education regarding these strategies can enhance the communicative competence of novice RNs, expanding their awareness of, and repertoire of communicative resources that can be used in practice, thus strengthening therapeutic relationships and the provision of safer patient care.

**97**
**Designing a model for medical students' communication skills training**

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**Mehri Yavari, Mashhad University Of Medical Sciences**

Background: Physicians play an important role in health promotion. In order to carry their professional tasks effectively, in addition to treatment and diagnosis capabilities, they need to be equipped with communication skills. For this, the training of these skills for students at medical schools through accurate and specific programming is critical. The present study aimed at developing and running a training model and program for facilitating communication skills training for medical students.

Methods: A model, based on ADDIE instructional design pattern, was developed according to students' needs. It was applied in an educational course, and its effect on students' communicative behavior was tested.

Findings: The results were indicative of a significant difference between students' communicative behavior scores before and after the intervention (p<.001) and between intervention and control group (p<.001). 94% of students participating in educational course were satisfied with their professional skills improvement owing to the program. 97% of these students recognized this course critical for medical students.

Discussion: Communication skills can be taught to medical students. As indicated by the results of the present study, developing a training program and model adaptable with students' needs and standard patterns can increase the effectiveness of communication skills training. Although not generalizable, the results of the present study can provide a suitable pattern for medical schools regarding communication skills training for medical students.

**98**
**Pilot implementation of a longitudinal curriculum of communication at four faculties of medicine in Germany – facilitating and inhibiting conditions**

**Barbara Hinding, IMPP - Institut für medizinische und pharmazeutische Prüfungsfragen**
**Christian Brünahl, Universitätsklinikum Hamburg-Eppendorf**
**Holger Buggenhagen, Universitätsmedizin der Johannes Gutenberg-Universität Mainz**
**Kirsten Reschke, Universitätsklinikum Magdeburg**
**Jobst-Hendrik Schultz, Universitätsklinikum Heidelberg**
**Jana Jünger, IMPP - Institut für medizinische und pharmazeutische Prüfungsfragen**

Background: The medical faculties in Germany are invited to include the development of communicative competence in their education. Much has already been achieved. Particularly the Masterplan Medizinstudium 2020 outlines the directions to reform medical studies. It stresses the importance of communication skills and recommends the implementation of the National Longitudinal Core Curriculum of Communication. To assist the faculties in this task, knowledge concerning the conditions and circumstances of implementation processes is necessary. Therefore the objective of our research is the identification of driving forces and barriers to the realization of longitudinal concepts of teaching and examining communication competence.

Methods: At first, a study was conducted to assess the state of implementation. To get more detailed information we carried out a comparative case study with four faculties of medicine in Germany in the next step. Interviews with teaching staff, professors and lecturers and moderated group discussions with subsequent comparative qualitative content analyses were used to gain a better understanding of facilitators and barriers for further development and implementation of the communication curriculum.

Findings: The findings provide insights into different states of development of communication curricula and the settings and circumstances under which the change process is taking place. Regarding limiting and facilitating conditions numerous factors were identified. As very important supporters were mentioned the motivation of teaching staff and committed students. Concerning the organizational level, a central coordination of and responsibility for teaching was seen as important. On the other hand insufficient coordination and lack of communication between the teaching staff of different departments were described as major constraints.

Discussion: Teaching and assessment of communication skills can be significantly different from university to university. Where teaching and testing communication is embedded in a longitudinal concept with a coherent series of training units other kinds of support are needed than in faculties only offering single courses. Recommendations for further steps of implementation therefore include a range of measures like examples of best practice, assistance in developing examinations, improvements in internal coordination and communication as well as overarching activities such as publicity work, better qualification of teaching staff and active involvement of students.

## 99
## Integrating effectively patient-centred communication and clinical reasoning skills in history taking training for undergraduate students

**Robert Hulsman, Academic Medical Centre**
**Frederique de Ree-Rammeloo, Academic Medical Centre**
**Hilde Oosterhuis, Academic Medical Centre**
**Leonie Abou Habaga – Bultje, Academic Medical Centre**
**Wassilis Bruins, Academic Medical Centre**
**Marcel Fabriek, Academic Medical Centre**

Background: Preclinical trainings are often focused on basic interview skills and not on thinking about differential diagnoses or clinical management (Keifenheim 2015). Teaching communication and clinical reasoning in isolation may prevent students from understanding the important link between these skills and may lead them to undervalue the psychosocial aspects of patient care (Windish et al. 2005). Medical students tend to lose patient-centered attitudes as they progress through medical school, especially during clinical clerkships (Aper et al. 2015). At the same effective history taking requires clinical knowledge to identify relevant questions and to interpret the patient's answers. Moreover, transfer of communication skills is most effectively when trained in a context resembling clinical practice. We developed a structured teaching method enabling students to integrate the active listening and basic clinical reasoning tasks.

Methods: Students are trained in small groups of 6 students, each practicing history taking with a simulated patient who initially presents the same reason for the encounter. Students prepare the role play by

    1) doing an elearning on active listening skills and

    2) studying 5 or 6 predefined diagnostic protocols related to the same reason for the encounter.

The elearning presents active listing skills related to:

    a) relationship building;

    b) gathering reliable biomedical information aboutthe complaints;

    c) asking about the patient's ideas, concerns and expectations;

    d) structuring theconsultation (Kurtz et al. 2003).

Clinical reasoning instruction focused on developing a patient-specific problem list and differential diagnosis. Problem lists included signs and symptoms of disease,past medical history, family history, psychosocial history, and patient preferences for care (Windishet al. 2005).

Findings: The structured teaching method was well received among all second year students in 2017.Students were able to combine active listening and clinical reasoning skills in their roleplay. They were able to make a differential diagnosis identifying the primary and secondary probable diagnoses from a predefined list of four possible diagnoses. Being supplied with a predefined set of diagnostic protocols was helpful.Implications: The presumed positive impact on transfer from a preclinical training setting withintegrated history taking to future clinical practice needs to be evaluated.

## 100
## Medical students´ emotional intelligence, empathy, and attitudes towards doctor-patient relationship

**António Barbosa, Universidade De Lisboa, Faculdade De Medicina**

Background: The ability to recognize and adapt to affective states in one's self and others is important for clinicians when interact with their patients and building the rapport and trust. The aim of this study was to understand the associations between medical students´ emotional intelligence, empathy, and attitudes towards doctor-patient relationship.

Methods: 289 first-year medical students completed the Interpersonal Reactivity Index (IRI), **Emotional Intelligence Scale (EIS), and the** Relationship Centered Medicine Scale (RCMS), which assess physicians´, medical students´ and patients´ attitudes toward the doctor-patient relationship through a 6-point Likert scale (1-Totally disagree; 6-Totally agree). Additional data including gender and age were collected.

Findings: Pearson correlations showed a positive association between emotional intelligence and empathy, emotional intelligence and attitude towards relationship centered medicine, and empathy and attitude towards relationship centered medicine. Female students had higher scores on empathy, emotional self-control, and understanding of other emotions.

Discussion: Understanding the students´ attitudes at the beginning of their medical education is to adjust the educational strategy in teaching clinical relationship. Medical schools should provide opportunities that promote the development of empathic ability, emotional intelligence across an undergraduate medical curriculum.

## 101
## Communication apprehension and the level of anxiety and related factors in the medical students

**Maryam Hadavi, Rafsanjan University of Medical Sciences**
**Zahra Hashemi, Rafsanjan University of Medical Sciences**

Background and Objectives: Communication Apprehension (CA) is characterized as the fear or anxiety about communicating with other people. Effective communication provides safe patient care, studies have indicated that health care students are not equipped with communication skills and this problem in the long run effects their care abilities. The purpose of this study was to investigate the communication apprehension and its related factors in the medical students at Rafsanjan University of Medical Sciences.

Materials and Methods: In this cross-sectional study a two part questionnaire consisting of demographic information and the Personal Report of Communication Apprehension (PRCA-24) was administered to 340 medical and paramedical students. PRCA-24 measures overall anxiety in four contexts of public speaking, dyadic interaction, small groups, and large groups. The scores below 51 indicate a very low, 51-80 average, and above 80 a high level of CA. Data was analyzed using descriptive and inferential statistics (Chi square and Kruskal Wallis Test).

Results: The mean and standard deviation score of PRCA-24 questionnaire were 68.64±4.89. CA in the dimension of public speaking was higher than the others. Evaluating the economic stability and its relationship to CA indicated a significant difference among all the contexts of the PRCA-24. There was no significant difference between the scores of PRCA-24 and entrance year to university (p=0.136) birth place (p=.994) birth rank (p=0.985) but a significant relationship between the scores of CA and the number of siblings (p=0.001) was observed

Conclusion: It is important to detect students with high CA and plan education programs and workshops, to prevent further communication problems after graduation which jeopardizes the patients care. Also, establishing communication skills in the future medical graduates seems of utmost necessary.

## 102
## An assessment of health literacy among patients in a teaching hospital in South East Nigeria

**Ikechukwu Obi, Department of Community Medicine, University of Nigeria**
**Chuka Agunwa, Department of Community Medicine, Faculty of Medical Sciences, College of Medicine, University of Nigeria**

Background: Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.

Health literacy entails knowledge of health topics in addition to basic literacy skills. People with limited health literacy often lack knowledge or have misinformation about the human body as well as of nature and causes of

disease. Deprived of this knowledge, they may not understand the relationship between lifestyle factors such as diet and exercise and various health outcomes.

This is a survey of health literacy level among outpatients at a teaching hospital, in south eastern Nigeria.

Methods:  A cross-sectional descriptive study with 161 outpatients selected by stratified sampling. Individual rating for health literacy was examined in relation to a total score, with scores assigned to levels of health literacy firstly as high and low then further as high, intermediate and low. Socio demographic variables were examined for association with health literacy levels. The Statistical Package for Social Sciences (SPSS) software was used for analysis.

Findings:  The modal age range was 46 years and above (32.3%), there were 96 (59.6%) females. Respondents were more of urban dwellers (81.4%) and mostly well-educated to tertiary level (60.9%). Majority of the respondents had scores that fell within the high health literacy level (57.8%) and when examined in three categories, majority (56.5%) were of the intermediate health literacy level. On testing for association, age and level of education showed statistically significant association with health literacy level (P<0.05).

Discussion:  Every hospital visit should be seen as an opportunity for health professionals to communicate health information to patients. The health literacy level of these mostly well-educated outpatients in the study teaching hospital is more intermediate than high, age and level of education were found to be associated with health literacy level. Health information developed for patients who attend clinics in this teaching hospital should be of the level suitable for moderate to highly educated patients.


## 103
## Health literacy of patients with different chronic illnesses in Hungary

**Orsolya Papp-Zipernovszky, Institute of Psychology, University of Szeged**
**János Tamás Varga, National Koranyi Institute for TB and Pulmonology Department of Pulmonary Rehabilitation**
**Andrea Klinovszky, Institute of Health Economy, Medical Faculty, Univ. of Szeged**
**Norbert Buzas, Institute of Health Economy, Medical Faculty, Univ. of Szeged**
**Peter J. Schultz, Institute of Communication and Health, Università della Svizzera Italiana**
**Marta Csabai, Institute of Psychology, University of Szeged**

Background: After the validation of health literacy (HL) tests, we have started measuring HL in clinical context, first in Hungary. The goal of the present study was to apply the Hungarian version of the Short-Test of Functional Health Literacy (S-TOFHLA) and perception-based screening questions with diverse groups of patients, chronic obstructive pulmonary disease (COPD) and type-2 diabetes.

Methods: In our first study 113 diabetes patients (38 male, mean age: 60.56) completed a questionnaire focusing on adherence, together with subjective ratings of the knowledge about diabetes and its treatments.  The second study used the S-TOFHLA and the Chew questions to measure HL among 80 COPD patients (43 male, mean age: 62.1 years). The HL scores of the COPD group were compared to a healthy sample matched alongside age and gender. Furthermore, the correlations of HL with demographic and psychological variables were calculated within the patient groups.

Findings: **Diabetes patients' HL scores showed** the opposite pattern of the international literature regarding demographic characteristics: older and lower educated patients scored higher ($Z_{age}$=-2.832, p=0.005; $Z_{education}$=-3.221, p=0.001). However, the positive correlations between HL and adherence ($r_{109}$=0.206, p=0.030) and inner health locus of control ($r_{89}$=0.821, p<0.001) were plausible. COPD patients had significantly lower HL than the healthy controls measured by both the S-TOFHLA ($t_{COPD}$=3.032, p<0.003), and by the Chew questions ($t_{COPD}$=-8.048, p<0.001). Younger and higher educated participants possessed higher HL based on their S-TOFHLA scores ($rho_{age}(78)$=-0.438, p<0.001, $t_{education}(78)$=-2.12, p=0.038). However, none of the psychological variables, which are usually reported to have correlations with HL, showed any relations with our tests.

Conclusion: Our findings suggest S-TOFHL**A as a better tool to measure patients' HL in medical context. The** psychological variables related to HL need to be further examined in Hungary. Our research can be a basis for developing effective techniques in patient education and providing more complex care.

**104**

**Development of an online tool to promote information-seeking self-efficacy**

**Yulia Strekalova, University Of Florida**

Background: Engagement with health information online has been linked to positive health outcomes. Yet, information exposure can also result in unintended effects, e.g., decisional conflict and information overload. Information-seeking self-efficacy has been identified as a strong moderating variable. The goal of this study was to develop an online tool promote information-seeking self-efficacy among health information consumers.

Method: Healthy adults (N=340) were invited to patriciate in an online experiment. First, they read an invitation to participate in a clinical trial. They were then randomly assigned to high or low self-efficacy condition. Participants in the high self-efficacy condition read a short message suggesting that careful evaluation of health information helps in making informed decisions about participation in health-related studies (verbal persuasion) and that many people like them make these decisions every day (vicarious experience). Next, they were provided with a list of possible questions and information topics they could pursue to learn about clinical research and encouraged to pick a few questions that interested them most. Finally, participants were asked, on their own, to write one or two questions or topics related to clinical research that they found personally interesting and relevant (performance practice). Once done, participants saw a new screen with personalized information containing the list of questions they had selected and questions or topics they had just written. Subsequently, participants responded to survey questions that measured their information-seeking self-efficacy (eHEALS, Norman&Skinner, 2006) and intention to seek additional information about clinical research.

Results: Self-efficacy manipulation was successful. The ANOVA revealed the expected simple main effect of manipulated self-efficacy level (high and low) on participants' self-efficacy for online information seeking, $F(1, 338) = 8.80$, $p < .003$, eta $= .03$ and intentions to seek additional information about clinical research.

Discussion: Previous research measuring information-seeking self-efficacy has documented its role as a key health communication variable. This study moved beyond measurement and provided empirical evidence for an online tool to promote information-seeking self-efficacy.

**105**

**Infographics: The power of visual communication to improve health literacy among cancer patients**

**Essie Torres, East Carolina University**
**Alice Richman, East Carolina University**
**Molly Robinson, East Carolina University**
**Judy Koutlas, Cancer Care Services, Vidant Medical Center**
**Phyllis DeAntonio, Cancer Care Services, Vidant Medical Center**

Background: Health literacy includes the ability to use printed, written, and verbal information for following medical directions to improve health. Health literacy is an overlooked problem in the prevention and treatment of cancer. For cancer patients, new treatment options (i.e. oral chemotherapy) and complex regimens require increased decision-making and treatment management. The focus of this study was to develop and evaluate the impact of infographic educational materials on health literacy for cancer patients taking oral chemotherapy medications.

Methods: This study is part of a larger randomized control trial assessing the effectiveness of a nurse coach intervention on medication adherence among cancer patients taking oral chemotherapeutic agents. We developed infographics that focused on understanding medical prescriptions and pill bottle labels, cancer terminology, risks associated with alcohol and tobacco use during treatment, mental and sexual health, and side effect management. We pilot tested developed materials via focus groups at cancer support group meetings and a Patient Education Committee, in a southeast regional cancer center in North Carolina. Participants were asked to provide feedback on usefulness, legibility, design, and aesthetics of each infographic. A pre/post-test was provided to participants to assess health literacy before and after infographic interaction.

Results: Preliminary analysis identified current barriers to medication adherence and gaps in terms of health literacy and cancer health literacy. Cancer patients did not understand basic cancer-related terminology, for example patients were confused on the meaning of the words biopsy, benign, malignant, palliative, efficacy, and inoperable. Other areas of low literacy included not being able to read and understand test results, pill bottle labels, or appointment cards. Barriers identified among patients include mental and sexual health concerns, assistance in

keeping appointments and adhering to treatment plan and dosing schedule. Preliminary analyses indicate that the infographics increased participant health literacy ($p < 0.05$). Final analysis of data will be presented at the conference.

Discussion: Infographic materials will be updated based on feedback, and implemented in the larger trial. We will continue to evaluate their effectiveness on improving patient health literacy and medication adherence. We believe these educational materials can be easily adapted for other lower literacy medical populations.

# Parallel Session 1

## Oral Presentations

### O.1.1
### A Structured Remediation Program for Communication Skills

**Pedro Morgado, School Of Medicine, University Of Minho**
**Ana Raquel Lemos, School Of Medicine, University Of Minho**
**Sara Almeida, School Of Medicine, University Of Minho**
**Joao J Cerqueira, School Of Medicine, University Of Minho**
**Nuno Sousa, School Of Medicine, University Of Minho**

Background. During medical school, some students experienced difficulties on acquisition and training of communication skills but schools do not usually have specific programs to deal with this issue. The objective of this work was to design a structured remediation program in communication skills for medical students that failed clinical evaluation.

Methods. Students that failed in the clinical skills examination at the end of the third-year were invited to join the 7-steps structured remediation program. This communication skills program included clinical practice with standardized patients, self-evaluation and evaluation by experts in communication skills and personalized interventions to improve communication abilities.

Findings. All students enrolled in the program have obtained success in the subsequent clinical skills examination and the program was valued by students enrolled, who asked for more steps and similar opportunities to learn.

Discussion. Implementation of a structured remediation program to improve communication skills was successful and well appreciated by enrolled students. Medical schools should address this problem and implement programs to deal with students with difficulties in communication skills.

### O.1.2
### An OSCE case to assess medical students' response to patients' request for unnecessary test:   A qualitative analysis of their communication challenges

**Felise Milan, Albert Einstein School of Medicine**
**Sandra Oza, Albert Einstein School of Medicine**
**Arthur Blank, Albert Einstein School of Medicine**
**Joseph Grochowalski, Fordham University**
**Pablo Joo, Albert Einstein School of Medicine**
**Todd Cassese, Quinnipiac, Netter School of Medicine**

Introduction/context: The Choosing Wisely initiative promotes conversations between patients and providers to decrease unnecessary medical interventions, and provides guidance for these discussions.[1] Educators must train learners to communicate with patients about value and risk in healthcare. We developed an OSCE case to assess medical students' communication skills and attitudes about discussion of value-based care with a patient...

Description: 178 students, at an urban US medical school participated in this OSCE after their 3rd year clerkships. A standardized patient (SP) presents with acute low back pain and requests an MRI (not indicated[2]). SPs used checklists to assess students' history (11 items), physical examination (9 items) and communication skills (a previously validated tool adapted for Choosing Wisely,[1] 14 items). Post-OSCE, students completed written notes about the encounter. They were asked to discuss their clinical reasoning as well as what communication challenges they experienced in response to the patient's request for an MRI.

Evaluation: Mean performance was 62.2% (SD 12.2%, range 40%-92%); OSCE case reliability, measured using the borderline regression method,[3] was good ($R^2$=0.65). Only 24% of students ordered an MRI.  Overall performance on the communication skills checklist did not correspond with ordering an MRI.  Preliminary thematic analyses of the

[1] http://www.choosingwisely.org
[2] Chou et al. Lancet 2009; 373:463-72.
[3] Homer and Pell. Medical Teacher 2009; 31:420-425.

post encounter exercise revealed themes including the challenges in preserving rapport, avoiding conflict in face of patient's request, communicating population health recommendations to an individual patient and effectively communicating the idea of potential harm from "false positive results".

Discussion: This OSCE case assesses competency in communicating with patients about unnecessary medical testing. Mixed methods analyses indicate that overall level of communication skill was not associated with students' response to the request for an MRI. However, counseling patients about practice guidelines and risks of testing was associated with decreased utilization of unnecessary interventions. Qualitative analysis of students' immediate reaction to this patient encounter reveals themes of communication challenges that can inform curriculum development to educate learners to communicate about value with patients.

### O.1.3
**Examiner and examinee gender affect communication-skills related OSCE outcomes in preclinical undergraduate medical students**

**Silas Taylor, UNSW Sydney**
**Matthew Haywood, UNSW Sydney**
**Boaz Shulruf, UNSW Sydney**

Background: Effective communication skills improve patient satisfaction and outcomes and are integral to good medical practice. An emerging area of communication research considers the effects of gender on communication skills performance, including in objective structured clinical examinations (OSCE). Studies repeatedly show that female doctors and medical students outperform males in such contexts. Additionally, assessment bias may exist as a function of examiner and examinee gender pairing. We seek to determine if this difference persists in other domains of assessed clinical competency, such as physical examination, or with a change in method of communication skills training (CST).

Methods: We performed a retrospective study of OSCE performances of two second year medical student cohorts. Estimated marginal means were used to compare students' total OSCE scores within three assessment domains (i.e. generic communication, clinical communication [history taking] and physical examination/procedural skills) with respect to examiner-examinee gender pairing. The 2014 cohort underwent role-play (RP) communication skills training (CST) (n = 235) while the 2016 cohort underwent volunteer simulated patient (SP) CST (n= 257).

Findings: Female students significantly outperformed male students across both communication domains, and the male examiner-female examinee dyad scored significantly higher than all other examiner/student gender pairings for generic communication and physical examination/procedural skills. These differences persisted even after switching to a SP CST model.

Discussion: In keeping with the literature, our female students outperformed their male counterparts in communication skills assessment, irrespective of the CST method. Additionally, the male examiner-female examinee dyad scores exceeded those of other gender dyads for both generic communication and physical examination/procedural skills. To explain this, we argue that good skills in the former (including non-verbal communication skills) may enhance performance in the latter by facilitating patient compliance and cooperation, thus enabling the student to demonstrate greater proficiency. The effect of gender on assessment results should be addressed in OSCEs and further research to minimise its impact should be undertaken. The superiority of female students in clinical assessments of communication skills (independent of the CST method) suggests that males may have unique learning needs which require different, or additional, educational approaches.

### O.1.4
**Swiss Federal Licensing Examination in Medicine - A national consensus on communication assessment**

**Cadja Bachmann, Insitute for Medical Education, University of Bern**
**Jan Breckwoldt, Office of the Dean, Faculty of Medicine, University of Zurich**
**Silke Biller, Office of the Dean of Studies, Faculty of Medicine, University of Basel**
**Sabine Feller, Insitute for Medical Education, University of Bern**
**Sören Huwendiek, Insitute for Medical Education, University of Bern**
**Noelle Junod Perron, Geneva Faculty of Medicine /Geneva University Hospitals**
**Andrea Lorwald, Insitute for Medical Education, University of Bern**
**Matteo Monti, Medical education unit, Faculty of biology and medicine, University of Lausanne**

**Kai Schnabel, Insitute for Medical Education, University of Bern**
**Michael Wilde, Office of the Dean of Studies, Faculty of Medicine, University of Basel**
**Ulrich Woermann, Insitute for Medical Education, University of Bern**
**Roger Kropf, Office of the Dean, Faculty of Medicine, University of Zurich**

Objectives: To describe a consensus process among all Swiss medical schools on the development of communication assessments for graduates.

Methods: Based on a needs assessment, literature review, communication models and national and international expert opinion, we developed elaborated communication OSCE stations for the Swiss national medical licensing examination in a multiple step Delphi consensus process. 36 medical educators from the five Swiss medical schools were involved in the process, with 20 of them being highly active in the five face-to-face meetings and between. The consensus finding process covered the application of communication models and assessment guides, a medical and communication content validation, appropriateness regarding the educational level, case development and descriptions, development of rating scales and detailed simulated patient roles. The assessments were pilot-tested, re-evaluated and revised to achieve final approval by communication and assessment experts.  In addition, we evaluated the consensus finding process in a survey.

Results: Six elaborated high-stakes communication OSCE stations were developed and approved by communication and assessment experts. The assessments will now be implemented in the Swiss Federal Licensing Examination. Consensus participants evaluated the process as successful. They appreciated the cooperation among all medical schools, the sharing of expertise, the open and collegial discussions as well as the outcomes. Challenges were seen in expenditure of time and at times in parallel actions in the work groups.

Discussion: Finding a consensus on high stakes communication examinations among all Swiss medical schools was labour-intensive and at times challenging. It required intense discussion but was perceived as fruitful and valuable. The consensus process was very beneficial regarding the outcome. Elaborated communication assessments have now become an essential part of the Federal Licensing Examination in Medicine in Switzerland. National high-stakes communication examinations should be developed and evaluated among all medical schools to achieve high quality, acceptance and validation.


## O.1.5
### The effect of a Revision Course in Communication on Examination Results  for Candidates taking MRCS  Surgical OSCE in the international centres

**Roger Vaughan, Royal College of  Surgeons London**

Background:  The Royal College of Surgeons England holds an MRCS surgical OSCE internationally and the UK. The exam results for the exam held outside the UK had previously shown poor communications results compared with the UK held examinations.  A day course (no fees charged) was developed for overseas candidates who wished to take the MRCS.  The specific learning objectives were to:

1.Recognise and utilise effective communications skills using the Cambridge Calgary framework, in line with the requirements of the MRCS OSCE

2.Utilise effective examination techniques for an OSCE

3. Understand the structure of the MRCS examination.

Methods:  The results of the communication part of the MRCS have been evaluated to compare the results of the candidates who had attended the course and not attended the course to see whether the course was effective in improving the communication skills as assessed by the MRCS OSCE. Structured feedback was also ascertained to evaluate the course.

Marks were obtained for all MRCS OSCE results for all candidates who have ever taken the exam. The candidate's individual marks for the 3 communication stations were analysed and compared with the MRCS exam database.

Findings:  14 courses have been run in India Egypt Sri Lanka Malaysia Cyprus, Sharjah and Egypt. The total number candidates was 276 over 2 years (2016 to 2017)   In Egypt the first pilot course 2015 showed an increase in marks following the course by 30% for the 10 candidates who took the course compared with the 10 who had not. 276 candidates had a mean increase in marks in communication from 8 to 14 (maximum mark 20) The pass mark in 210 candidates was above the mark required to pass each station. Candidates who had not had communication training

had mean mark of 8/20. Having completed the course compared with the overall results for overseas taking MRCS the candidates had a significant improvement P=.01

Discussion: Teaching communication skills in a short course has major effect on results in post graduate surgical exams in countries, where communications skills are not normally taught.

## O.2.1
## A daily diary to assess fears of recurrence in breast cancer patients during radiotherapy

**Gerry Humphris, University Of St Andrews**
**Luke Barracliffe, University Of St Andrews**
**Yuan Yang, Southern Medical University Nnfang Hospital**
**Josie Cameron, Edinburgh Cancer Centre, NHS WG Hospital**
**Carolyn Bedi, Edinburgh Cancer Centre, NHS WG Hospital**

Background: Fear of cancer recurrence (FCR) is one of the greatest concerns expressed by patients with breast cancer. It is reasonable to hypothesise from Lee-Jones et al. model (informed by Leventhal) that FCR develops during the treatment phase. The final major treatment component for these patients is radiotherapy. The aim of this study was to examine FCR levels over this treatment period and explore possible mechanisms to explain significant changes in FCR level. Our objectives were (i) plot the trajectory of FCR (ii) examine if the diary free-response comments match the Lee-Jones' FCR model (iii) determine if the content and timing of the comments are associated with substantial changes in FCR.

Methods: A concurrent mixed methods design was utilised. Ethics permission was obtained. Patients entering a cancer centre radiotherapy treatment service were invited (with consent) to complete a daily diary during their course of radiotherapy. The diary consisted of an A5 format booklet. One page was devoted to each day. Patients completed a 3-item measure of FCR (Humphris et al. 2018), Cronbach's alpha was 0.92, and a free-format open response box. Multi-level linear regression models were performed for the FCR ratings and a 'deductive content analysis' conducted with free-response comments.

Findings: Of the 97 patients who entered the FORECAST study 75 completed diaries, of which 58 contained written comments plus FCR ratings. Average age of these patients was 59 years receiving approximately 17 (mean) radiotherapy sessions. There were no differences between patients who made or did not make comments (in treatment sessions, receipt of chemotherapy or living conditions. The qualitative analysis revealed >50% of the comments made reference to self-regulation model features (Lee-Jones et al). When a large decrease (3 scale units) in FCR was evident the probability of a written comment was over 3 times greater on the day following (p < .01) adjusting for diary sequential position.

Discussion: This is the first report to link the developmental trajectory of cancer fears during treatment to a voluntary daily written report of patients. An appraisal process as predicted by Leventhal's Common Sense Model was found.

Support from Breast Cancer Now.

## O.2.2
## Behind closed doors: How advanced cancer couples communicate at home

**Maija Reblin, Moffitt Cancer Center**
**Steven Sutton, Moffitt Cancer Center**
**Richard Heyman, New York University**
**Susan Vadaparampil, Moffitt Cancer Center**
**Lee Ellington, University of Utah**

Background: Much of the knowledge about communication that occurs between couples coping with cancer is based on self-report. Our objective is to describe naturalistic communication in the home between advanced cancer patients and their spouse caregivers using self-report and observational methods. A second goal is to identify self-report measures that co-vary with cancer and relationship talk in observational data.

Methods: Data were gathered as part of a prospective observational study with 87 heterosexual English-speaking couples comprising a patient undergoing active treatment for advanced lung or GI cancer and a cohabitating

spouse caregiver. Couples were recruited from an outpatient cancer clinic. Consenting couples completed surveys assessing demographics, psychosocial variables, and typical communication patterns. **Both patient and caregiver wore a digital recorder to capture communication in the home for one day. Trained coders identified communication participants and categorized communication as pertaining to the relationship, cancer, or other topic. D**escriptive analysis was performed on self-report and observational data including the amount of talk by domain for both the patient and the caregiver.

Findings:  Both patients and caregivers self-reported high likelihood of engaging in positive interactions and relatively low likelihood of avoidance in both cancer and relationship domains. The average length of recording was 9.6 hours (range=1.4-16.0 hours), with an average 2.3 hours of total talk (range=3.37 minutes-6.56 hours). The amount of talk within cancer and relationship domains was highly skewed; a large minority of couples had no talk in these domains and few couples had a high amount of talk.

Discussion:  **This study is one of the first to assess continuous naturalistic recording of a "day in the life" in the home** of couples coping with advanced cancer. Our findings contribute a key piece to understanding the advanced cancer patient-caregiver dyadic experience. **There appear to be few cues in daily life to encourage most couples to initiate or sustain conversation about potentially difficult topics. Foundational work may be required to encourage and cue more overall communication in key domains to provide more context for beneficial communication processes, such as mutual self-disclosure.**

## O.2.3
## Health literacy and patient participation in multidisciplinary tumor conferences in breast cancer care

**Christian Heuser, Center for Health Communication and Health Services Research (CHSR), University Hospital Bonn**
**Annika Diekmann, Center for Health Communication and Health Services Research (CHSR), University Hospital Bonn**
**Christoph Kowalski, German Cancer Society e.V. (DKG)**
**Anna Enders, The Federal Centre for Health Education (BZgA)**
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Background: International studies investigated that decisions in tumor conferences (TC), which consider patient preferences, result in better patient outcomes. Furthermore, it has been shown that in some breast cancer centers in Germany, patients participate in TC. We have shown that their participation depends on individual characteristics. A possible influencing factor is health literacy (HL) of patients, but so far, little is known about the association between HL and participation in TC. To close this gap in research we analysed if HL is associated with patient participation in TC.

Methods: In a prospective, multicenter cohort-study newly diagnosed breast cancer patients were surveyed directly after surgery, 10 and 40 weeks later. HL was measured with the help of the HLS-EU-Q16 questionnaire. After descriptive analyses, logistic regression analysis was applied to estimate the association of patient participation at T1 with HL, sociodemographic and disease-related characteristics (N = 1127).

Findings: Descriptive results show that 7.7% took part in TC. The participation significantly differs by HL status (p = .008). Patients with less difficulties to find, understand and evaluate health information are more likely to participate in TC. Descriptive differences were also investigated between age, formal education and health insurance status. The logistic regression model revealed that HL significantly is associated with participation of breast cancer patients in TC (Nagelkerke´s Pseudo-R2 = 0.06). It shows that patients with a sufficient HL are more likely to participate in TC (OR = 3.2, 95%-CI = 1.1-9.3).

Discussion: The findings show that significant differences in participation exist between patient groups and suggest that there is a need to better address HL and participation in TC during and after treatment. However, for future research on patient participation in tumor conferences and HL, questions concerning organisation, communication and decision-making with and without patient participation will have to be addressed as well as the perspective of patients and providers equally. In this regard a research project has started.

## O.2.4
**Patient-physician-communication and disease-specific health-related quality of life of prostate cancer patients – a 3.5 year follow up study**

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Background: First evidence suggests that health related quality of life (HRQoL) of prostate cancer patients is associated with aspects of psychosocial care. So far, little is known about the associations between prostate cancer-specific symptoms and burden of side-effects from treatment on the one hand and patient-physician-communication on the other hand. Therefore, it is the aim of this study to examine associations between disease-specific HRQoL and psychosocial care by urologists in surgical treatment of prostate cancer.

Methods: HAROW is a prospective, observational study designed to collect data of the different treatment options for newly diagnosed patients with localized prostate cancer. At 6-months intervals, clinical data (D'Amico risk categories, Charlson comorbidity index), patient–physician communication (standardized psychosocial-care instrument), and disease-specific HRQoL (EORTC QLQ - PR25) were assessed. Data of N=1,722 patients undergoing radical prostatectomy were analyzed over a 3,5-year follow-up period by longitudinal multilevel analysis.

Findings: Patients' mean age was 65 years, most of them had a low (31%) or intermediate (38%) risk of cancer growth and spread, and the majority (73%) had a Charlson comorbidity index of 0. Patients rated aspects of psychosocial care generally high over the course of treatment. The multilevel model showed significant associations between shared decision-making and incontinence/urinary symptoms as well as between information and sexual functioning. Changes in disease-specific HRQoL-subscales over time were significantly associated with support by physicians and shared-decision-making.

Discussion: Our results suggest that not only general aspects of HRQoL, but also urinary and sexual disease-specific symptoms are associated with aspects of psychosocial care by physicians. Patients feeling supported, informed, and involved in decision-making experience less side effects of surgical treatment. Although causal inferences cannot be drawn, interventions should be designed for urologists to enhance their awareness for the relationship between communication and treatment outcomes.

## O.2.5
**The Relation Between Anxiety and Information Recall in Newly Diagnosed Cancer Patients**

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Background: Cancer patients forget substantial amounts of information provided by their oncologist, particularly older patients. Yet, during the early phase of diagnosis and treatment planning, information is crucial for patients to make informed decisions and manage their disease. Previous research has indicated that many newly diagnosed cancer patients experience clinical levels of anxiety. Although it is widely assumed that anxiety negatively impacts information recall, hardly any evidence for this relationship exists for clinical settings. This study examines whether anxiety and age affect information recall in newly diagnosed cancer patients.

Methods: Data was collected from 91 colorectal new cancer patients visiting a multidisciplinary outpatient clinic. Prior to their visit, patients completed an online questionnaire to record background variables (T1). Directly after their visit, patients filled out a questionnaire regarding experienced anxiety using the 6-item State-Trait Anxiety Inventory (STAI-6) (T2). All consultations were video recorded to formulate recall questions tailored to individual patients' consultations following the Netherlands Patients Information Recall Questionnaire (NPIRQ), which were asked within 36 – 48 hours after their visit (T3). Regression analyses, in which was controlled for education level, national cancer screening and amount of information provided during consultation, were used to answer our research questions.

Findings: On average, patients recalled 60% of the diagnostic and treatment planning information ($SD$ = 16.88; range = 22.22 – 100.00). Older patients (≥65; $M$=53.99) recalled more than 10% less information than younger patients (<65; $M$=64.84), $t(76)$=2.96, $p$<.004). Anxiety was the strongest predictor of information recall ($b^*$ = -.28, $p$ = .011), followed by age ($b^*$ = -.23, $p$ = .031). There was no interaction effect between anxiety and age.

Discussion: It is crucial **to consider patients' anxiety during the** diagnostic and treatment planning phase, as this clearly **negatively impacts patients' memory of medical information**, regardless of their age.

Although the association between anxiety and recall has been generally assumed, this study is one of the few that examines the anxiety-recall relationship in a clinical setting. Identifying what helps patients to remember medical information at the point of cancer diagnosis when information needs are highest is crucial for designing effective health communication interventions.

## O.3.1
## A framework for developing interventions to support cancer patients in expressing concerns

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Background: Cancer patients' concern expression in consultations is associated with positive outcomes such as reduced levels of anxiety. Patients, however, can experience difficulties in expressing their concerns during consultations. To date, most research in the concern expression literature has been focused on interventions for providers. The few interventions that have been developed for patients vary in their effectiveness. Furthermore, **interventions do not always take patients' instrumental (e.g., receiving insufficient information) and emotional (e.g., fear) concerns, and preferences for intervention delivery into account. This study aims to explore patients' needs for** support and preferences for intervention delivery for expressing instrumental and emotional concerns.

Methods: Six focus groups ($N$ = 39) were conducted among cancer patients and survivors. The focus groups were transcribed verbatim and analysed with the framework method. A priori codes were based on the behaviour change technique taxonomy. Behaviour change techniques refer to the active ingredients in an intervention that **can address patients' needs for support. When patient needs emerged that could not** be coded with a priori codes, a new code was added. In addition, preferences for the way of delivering the techniques (interpersonal or mediated communication) were coded.

Findings: **The results show that patients' needs for support can be fulfilled by pra**ctical and emotional support, behavioural practice/rehearsal, help with preparation, instructions on how to perform the behaviour, feedback on behaviour, prompts/cues, a different structure for the consultation and tailoring. For instrumental concerns patients preferred more practical techniques such as instructions on how to express concerns in the consultation. For emotional concerns, patients indicated a need for more intensive techniques such as a different structure for the consultation. The preference for interpersonal and mediated communication differed per technique. For example, for social support techniques patients mostly preferred interpersonal communication and for preparation techniques mostly mediated communication.

Discussion: Patients express a variety of needs for support to enhance their discussion of instrumental and emotional concerns. If these different needs are taken into account, more effective concern expression interventions can be developed in the future. Based on the results, a framework with practical guidelines for intervention development is proposed.

## O.3.2
## Anesthesiologists' Verbal and Nonverbal Response to Pain

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**Jill Laquidara, Lesley University**
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Background: Acute pain often goes unrecognized, undertreated or untreated. The purpose of the present study was to examine anesthesiology residents' response to verbal and nonverbal pain cues initiated by a standardized patient and confederate nurse.

Methods: Sixty-five first and third year residents participated in a pre-operative emergent surgical interaction. We used the Empathic Communication Coding System to assess the presence and intensity of pain cues and resident response level on a hierarchical scale. We also coded residents' nonverbal behavior following each pain cue, including the presence/absence of touch and the intensity of eye contact. In order to examine the relationship between characteristics of the pain cues and resident responses, we correlated cue characteristics with response characteristics for each resident and present the mean correlation across all residents.

Findings: Results showed that nonverbal pain cues compared to verbal pain cues were related to lower resident response levels ($Mr = -.46$, $SDr = .41$). Pain cues initiated by the nurse as opposed to the patient were related to more resident touch ($Mr = .13$, $SDr = .40$) and a higher response level ($Mr = .32$, $SDr = .42$). Finally, more intense pain cues (by the nurse and patient) were related to higher resident response levels ($Mr = .27$, $SDr = .39$).

Discussion: Results suggest that in healthcare interactions with patients in pain, other healthcare professionals, such as nurses, may play a vital role in eliciting more quality care and more empathic responses from physicians.


**O.3.3**
**Association of Clinician Mindfulness and Empathy with Response to Emotional Cues and Concerns**

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**Jenny Park, Johns Hopkins University School of Medicine**
**Dingfen Han, Johns Hopkins University School of Medicine**
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Background: Clinicians often miss opportunities to provide empathic responses to patients. We studied how clinician mindfulness (i.e. purposeful and nonjudgmental attentiveness to one's own experience, thoughts, and feelings) and empathic tendency (i.e. proclivity to respond to the observed experiences of another) are associated with response to patient emotions.

Methods: With IRB approval, we audio-recorded 19 HIV clinicians with 43 adult patients new to HIV care at an academic medical center. Patients were recorded up to three times within the first year of HIV care; 91 encounters were recorded. At baseline, clinicians completed the Mindful Attention Awareness Scale and Empathic Concern subscale of the Interpersonal

Reactivity Index. Encounters were coded using the Verona Coding Definitions of Emotional Sequences (VR-CoDES), which identifies patients' indirectly expressed emotional "cues" and directly expressed "concerns" and providers' responses to those cues and concerns. Provider responses were grouped as follows: providing space, explicitness, empathy, exploring, acknowledgment, giving information, and blocking. We used generalized estimating equations to account for clustering of patients within providers to assess the associations between provider mindfulness and empathic tendency with types of responses.

Findings: Most patients were male (74%) and identified as African American (61%) while most providers were female (79%) and identified as White (68%). Most encounters (71%) contained at least one cue or concern (range 1-16), with 250 cues/concerns in total. Higher provider mindfulness was associated with more cues/concerns raised by patients (IRR=1.02, 95% CI 1.011.03); mindfulness was not associated with any provider response types. Providers with higher empathy had greater odds of acknowledging (OR 1.06, 95% CI 1.01-1.12) and lower odds of blocking patients' concerns (OR 0.85, 95% CI 0.73-0.99). There was a trend towards higher provider empathy being associated with a greater odds of providing space (OR 1.10, 95% CI 0.99-1.23).

Conclusions:  More mindful clinicians create environments where patients feel comfortable raising emotional concerns, and more empathic clinicians respond with more acknowledgement and less blocking of patient emotion. As this was a small study, further research should attempt to replicate these findings and assess whether interventions to enhance mindfulness or empathy improve patient care.

## O.3.4
## Effect of education on communication skills and the area of training in empathy in allied health technologies

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Background: The importance of empathy in the context of health care professions is widely accepted. Much research conducted in this area with Medical students yields conflicting results. Some studies indicate that empathy declines during medical training and, more recently, others suggest that it remains the same or increases throughout medical school. However, little is known about empathy among students in Allied Health Technologies (AHT) programs. The goal of this study is to compare empathy over time in students from different Allied Health Technologies programs, considering their health area of choice and exposure to communication skills courses (with or without patient care * with or without communication courses in their curricula).

Methods: This is a longitudinal study that compares 155 undergraduate students in their first- and third-year of school. Students are enrolled in the areas of Therapeutic Intervention, Laboratory and Radiation. Some of these students have communication courses in their curricula, whereas others do not. Their mean age was 19.30 years old (SD = 2.78) in their first year. 82.6% were women.  They were recruited and given written informed consent before completing the Jefferson Scale of Physician Empathy - student version (JSPE-S).

Findings: Analyses showed a significant increase in some empathy dimensions from the 1st to the 3rd academic year. Students attending communication courses in AHT scored higher on empathy. These results were mediated by the training area.

Discussion: These findings help us to understand the development of empathy throughout training programs in health technologies and suggest that training programs are important for the development of communication skills such as empathy.  Students' communicational attitudes could have different implications for their respective professional areas (such as patient's care or team work in stress-generating environments such as laboratories) that need to be discussed. These results are an important first step in the characterization of the communicational profile of students in AHT and for the inspection of the effects of training in empathy.

## O.3.5
## Promoting empathy among medical students: A two-site randomized controlled study

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Objective: To assess the effects of Patient Relationship Training groups (Balint-type) (PRT) on empathy measured by the Consultation And Relational Empathy Measure (CARE) scale rated by standardized patients during objective structured clinical examination and self-rated Jefferson's School Empathy Scale - Medical Student (JSPE-MS©) among fourth-year medical students.

Methods: A two-site randomized controlled trial were planned, from October 2015 to December 2015 at two different universities in France. Eligible students were fourth-year students who gave their consent to participate. Participants were allocated in equal proportion to the intervention group or to the control group. Participants in the intervention group received a training of 7 sessions of 1.5-hour PRT groups, over 3 months. The main outcomes were CARE and the JSPE-MS© scores at follow-up.

Results: Data from 299 out of 352 randomized participants were analyzed: 155 in the intervention group and 144 in the control group, with no differences in baseline measures. There was no significant difference in CARE score at follow-up between the two groups (P = 0.49) but the group by gender interaction and the group by baseline JSPE-MS© median split interaction were both significant (P =0.007 and P =0.035, respectively). The intervention group displayed significantly higher JSPE-MS© score at follow-up than the control group [Mean (SD): 111.9 (10.6) versus 107.7 (12.7), P = 0.002]. The JSPE-MS© score increased from baseline to follow-up in the intervention group, whereas it decreased in the control group [1.5 (9.1) versus −1.8 (10.8), P = 0.006].

Conclusions: PRT (Balint-type groups) may contribute to promote clinical empathy among medical students.

Trial registration: NCT02681380

## O.4.1
## Development and validation of a computer-based instrument to measure health literacy skills for informed participation in colorectal cancer screening using Item Response Theory

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The aim of this study was to develop and validate an interactive computer-based instrument to measure health literacy skills in decision making on colorectal cancer screening using item response theory (IRT) approaches. The instrument was based on a conceptual framework of health literacy skills for informed decision making in cancer screening, and validated among 693 individuals eligible for colorectal cancer screening (55-75 years old). Preliminary exploratory factor analysis suggested four dimensions (comprehension, numeracy, application and communication) after slightly modifying the item structure. Cronbach's alpha was 0.78 for the total scale. Results from the IRT analyses and test-retest reliability will be presented at the conference. This study provides insight in how relevant domains of health literacy for informed decision making in cancer screening can be measured, and serves as an example for contextbased measurement of health literacy. Context specific measurement of health literacy is essential to improve accessibility and effectiveness of health care and prevention. The developed measure can be used to investigate the role of health literacy in informed decision making about colorectal screening, but can also be applied in other international cancer screening contexts.

## O.4.2
## Effectiveness of tailored rehabilitation education on health literacy and health status of postoperative patients with breast cancer: a randomized controlled trial

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Background: The improvement of breast cancer treatment and the extension of survivorship have led to the development of postoperative complications among cancer survivors. Health literacy (HL), defined as patients' capability of using health information to maintain their health status, can enable breast cancer patients to manage postoperative complications.

Objective: The aim of this study was to develop a tailored rehabilitation education (TRE) program and examine the effectiveness of this program in improving the HL and health status with breast cancer.

Methods: This randomized controlled trial recruited 99 breast cancer patients (49 and 50 in the intervention and control groups, respectively) within 1 week after surgery. Four-week individualized TRE programs were implemented to improve their HL and health status.

Results: Our results showed that the TRE program produced significant improvements in HL and health status in the components of the International Classification of Functioning, Disability and Health (ICF). However, no significant difference was observed in the activity scores obtained using the Barthel Index between the two groups.

Conclusion: Our finding supports the effectiveness of TRE in improving HL and ICF health status, except for the activity component, among breast cancer. TRE is a practical method for improving HL and health status.

Implications for practice: Our study demonstrated that implementing a month of TRE program could significantly improve HL and health status among breast cancer patients. Clinician could incorporate the TRE techniques in the rehabilitation sessions for the better health of post-operative patients with breast cancer.

## O.4.3
## Health Literacy and Health Service Utilization: A multidimensional Approach

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Background: The HLS-EU instrument is an approach to measure health literacy (HL) as a broad variety of competences needed to navigate and actively participate in health care systems. Poor HL is expected to be associated with poor health outcomes and inefficient use of health services. A previous study combined the HLS-EU-measure with a scale for assessing health-related knowledge. Four Health-Literacy-types were extracted (low HLS, low knowledge [1]; low HLS, high knowledge [2]; high HLS, low knowledge [3]; high HLS, high knowledge [4]), which were found to differ with respect to health behaviour, and health status.

The actual research was aimed to analyse the association between hl-types and health service utilization and the related costs.

Methods: The study is based on a random sample of 3500 inhabitants (aged 17+) covered for healthinsurance by the Upper Austrian Sickness Fund (the mandatory health insurance provider). Survey data was collected by mailed questionnaire. Registered data of individual health service use was drawn from the record data of the health insurance. Based on the consent of respondents, survey and registered data were matched for 660 respondents. Generalized linear models based on negative-binomial and gamma distribution were estimated to analyze the association between health-literacy types and healthcare use as well as the related healthcare costs.

Findings: Healthcare utilization and healthcare costs were found to increase with poorer subjective health, higher age, and lower subjective socioeconomic status. Significant interaction effects between health-literacy types and age as well as subjective health with respect to healthcare use and healthcare costs were confirmed. These interaction effects show that the positive association between age and poor subjective health with healthcare use and healthcare costs is amplified for individuals of health literacy type 3.

Discussion: A significant association between health literacy and healthcare utilization is confirmed. The findings suggest that the combination of high subjective health literacy and low health-related knowledge is associated with higher healthcare utilization and higher healthcare costs. As a conclusion the multidimensional nature of HL should be acknowledged in that different HL-combinations lead to distinct patterns of health care utilization and needs.

## O.4.4
## Health literacy and medico-social follow-up among French cancer survivors 5 years after diagnosis: the national VICAN survey

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Background: These last decades, the progress of the research regarding prevention and early diagnosis allowed to better treat and to increase the survival of cancer patients. Thus, more people are living after a diagnosis of cancer than ever before. However, the impact of health literacy (HL) on medico-social follow-up of cancer survivors is not known. Our aim was to study this association five years after diagnosis.

Methods: VICAN is a national survey of French cancer survivors, aged 18–82, diagnosed with primary cancer between January and June 2010. Data were collected from telephone interviews 5 years after diagnosis. The Single Item Literacy Screener (SILS) was used to define categories of functional HL (inadequate and adequate). Questionnaire also asked the patients for their follow-up by general practitioner (GP) and social worker (SW) regarding their cancer disease.

Results: The 4 045 participants were 57.4±12.9 years old at diagnosis (range 20 to 82) and 1 495 (37%) were classified as having inadequate HL. A majority of cancer survivors (66.7%) was followed-up by a GP regarding their cancer. Concerning social follow-up, only 14.5 % had a contact with a SW. Inadequate HL was associated with more frequent medico-social follow-up. After adjustment for sociodemographic, medical and psychosocial characteristics, follow-up by GP was more frequent among survivors with inadequate HL (OR=1.52, 95% confidence interval [1.32-1.77]). However, social follow-up was associated with sociodemographic characteristics (age, sex, income, socioeconomic deprivation index), mental health, cancer severity indicators but not significantly with HL level (OR=1.20, 95% confidence interval [0.99-1.47]).

Discussions implication: French cancer survivors with inadequate HL seem to receive the closer medico-social follow-up they might need. The GPs are the first source of information for patients. The follow-up of the patients with inadequate HL level requires a particular attention to ensure effective communication and information exchange. Awareness and training of GPs on follow-up care of this category of patients are necessary.


## O.4.5
## Patient Perceptions of Disease Chronicity and its Influence on Self-reporting of Morbidity

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**Rachel O'Conor, Northwestern University**
**Marina Arvanitis, Northwestern University**
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**Michael Wolf, Northwestern University**

Introduction: Accurate self-report of chronic conditions is important for both healthcare professionals and researchers. Reasons for misreporting may include misunderstanding conditions or perceptions that a condition does not exist when symptoms are under control. We examined the agreement between self-reported and medical chart hypertension diagnosis and factors associated with that agreement in a sample of community dwelling older adults.

Methods: Medical records were obtained from 808 patients ages 55-74 from one academic and six community ambulatory care clinics in Chicago, IL. Patients completed structured interviews including self-report of sociodemographic characteristics and chronic conditions and a health literacy assessment. Chronic conditions, current medications, and blood pressure readings were extracted from patients' medical records. Agreement between patient self-report and medical record hypertension diagnosis was summarized using kappa statistics, and sensitivity and specificity were calculated using the medical record as the standard. Patients were classified by awareness of diagnosis and patient demographics, literacy levels, and blood pressure measurements (controlled/uncontrolled) were compared using Fisher's Exact tests, overall and stratified by disease status.

Findings: Based on medical records, 65.4% had a diagnosis of hypertension. Agreement with self-report was high with kappa=0.75, sensitivity=87% and specificity=90%. Overall, 12% of participants incorrectly reported their hypertension diagnosis status. False negatives (self-reporting not having when chart indicates a diagnosis) were more likely if patients' blood pressure was under control (16.4%) than if it was uncontrolled (9.7%, p=0.03). In those without a diagnosis, false positives (self-reporting a diagnosis having when chart does not) were more likely if their blood pressure was uncontrolled at their last visit (35.1%) than if it was not (5.1%, p<0.001) and if participants had low literacy (35.7%) compared to those with marginal (0.1%) or adequate literacy (8.6%, p=0.02). Awareness did not differ by sociodemographic characteristics.

Discussion: Our findings indicate self-report is overall a reliable method of collecting hypertension diagnosis data in older patients. However, patients failed to accurately report a diagnosis of hypertension depending on blood pressure control. Healthcare providers and researchers should be aware of potential discordance among such patient populations and continuously educate patients on the chronicity of their conditions.


## O.5.1

**Addressing the lack of health literacy tests for South African indigenous languages: Developing the SHLT**

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Background:  An absence of suitable health literacy tests renders accurate information on health literacy among South Africans wanting, the veracity of associated threats uncertain, the ability to develop fitting health communication materials diminished, and the effectiveness of health communication unknown. Available tests predominantly originated in first world countries and are typically not suitable for use in this country with its diverse social, cultural, economic and educational milieu; overburdened public health care system; quadruple burden of disease; and 11 official languages. This project set out to address part of this problem by developing an appropriate health literacy test for one of the indigenous languages, i.e. Sesotho.

Methods:  A mixed method design was employed to develop the test. Methods comprised literature study, systematic searches, and development of a health literacy test item pool. During a multi-disciplinary workshop, that included participants from health, communication and language Departments at the University of the Free State and Michigan, and participants from relevant Government Departments and NGOs, test items were selected, aligned to the context, and through Delphi Technique contact sessions scrutinised for clarity, understandability and appropriateness, categorised under conceptual framework elements, and cross-culturally translated from English to Sesotho. Readability was tested using the Coleman-Liau Index.

Findings:  A well-balanced, suitable, comprehensive and user-friendly 40-item Sesotho Health Literacy Test (SHLT) addressing the domains of health care, disease prevention and health promotion ensued from this process. Readability testing through the Coleman-Liau Index scored 4.19, which means that it is suitable for grade 4 level education, which the literature shows to be an appropriate level for the context.

Discussion:  In the complex and overstretched South African public health sector with often failing verbal and written communication, being able to gauge health literacy is crucial. The SHLT will facilitate health literacy testing among the Sesotho speaking peoples in the country, and will allow for improved alignment and streamlining of health information and improved health communication. In the international arena this work is valuable in the sense that the context-sensitive process followed to develop the SHLT can be replicated to develop suitable tests for indigenous languages in other developing countries.

## O.5.2
**Affective and Instrumental Needs of Older Migrant Cancer Patients and Their Healthcare Providers**

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**Barbara C. Schouten, University Of Amsterdam, Department of Communication Science, ASCoR**
**Nida Gizem Yilmaz, VU University Medical Center, Department of Communication Science**
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Background:  Due to lower language proficiency and socio-cultural factors, older migrant cancer patients often experience miscommunication with their healthcare providers. The primary objective of the present research project is to systematically develop a digital oncological tool that will help decrease language and cultural related barriers between older cancer patients of Turkish and Moroccan origin and their healthcare providers. To this end, this study aimed to identify the main themes that should be addressed by the oncological module.  The main research question of the present study is: What are the affective and instrumental needs of older migrant cancer patients and their healthcare providers?

Methods: In-depth interviews were conducted with Turkish and Moroccan patients (N = 19, 13 women, Mage = 68.2 years). In addition to that two focus groups were conducted with general practitioners and oncology nurses (N = 11, 8 women, Mage = 50 years). Topic lists included questions on the affective and instrumental needs of both patients and healthcare providers. All interviews were audiotaped and transcribed verbatim by bilingual research assistants. Analysis were conducted via AtlasTi using the grounded theory approach.

Results:  From the patient interviews four main affective needs emerged relating to: (1) doctor-patient communication, (2) psychological support, (3) coping with negative emotions, and (4) peer support. Next to the affective needs, four main instrumental needs emerged relating to: (1) healthcare system including patient rights and access to services, (2) self-treatment possibilities, (3) illness-related issues (e.g. side-effects), and (4) clinical trials. Focus groups with the healthcare providers revealed three main topics that they need more information about: (1)

the extent of patients' instrumental needs, (2) how to fulfill patients' affective needs, and (3) the role of family members.

Discussion: The findings indicate that both patients and their healthcare providers struggle with a lack of unfulfilled affective and instrumental needs. To properly address these emerging needs, we have developed educational videos and QPL's which might enhance the quality of oncological care for older Turkish and Moroccan cancer patients.

## O.5.3
## GPs' communication with Aboriginal Australians with acquired neurogenic communication disorder

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**Elizabeth Armstrong, Edith Cowan University**
**Judith Katzenellenbogen, University of Western Australia**
**Juli Coffin, The University of Notre Dame**
**Sandra Thompson, University of Western Australia**
**Natalie Ciccone, Edith Cowan University**
**Leon Flicker, University of Western Australia**
**Colleen Hayward, Edith Cowan University**
**Deborah Woods, Geraldton Regional Aboriginal Medical Service**
**Meaghan McAllister, Edith Cowan University**

Background: This study examined the perceptions of general practitioners (GPs), from Western Australia, of their communication with Aboriginal patients who have acquired communication disorders (ACDs) after stroke or traumatic brain injury (TBI). GPs are pivotal to primary healthcare delivery and to "Closing the Gap", the wide health disparity existing for Aboriginal people, which includes much higher rates of stroke and TBI than found in non-Aboriginal people. Considering approximately a third of people have ACDs after stroke or TBI, they are likely to present to GPs with residual, chronic ACD, often with multiple co-morbidities and sometimes complex social situations. No previous studies have explored GPs' perspectives or management of chronic ACD, or considered how they view their communication with these patients.

Methods: A qualitative descriptive approach was employed using audiorecorded interviews and focus groups with 23 GPs from Perth and five regional sites. Verbatim transcripts were uploaded into NVivo 11 for coding and the data were analysed thematically and checked through a rigorous, team-based consensus process. Ethical approval was granted through multiple human research ethics committees including two universities and the Western Australian Aboriginal Health Ethics Committee.

Findings: GPs reported little in their training on neurogenic ACD. They struggled to tease out ACD from cultural-linguistic differences to their own communication content and style. Where communication was difficult, they had few resources or strategies to help, and depended on families and Aboriginal Health Workers to interpret and assist. They did not generally use formal interpreting services or refer to speech pathology, considering it inaccessible, overstretched and unable to offer improvement beyond the subacute phase. They reported communication (dis)ability taking second place in consultations compared to other pressing medical concerns.

Discussion: ACDs are acknowledged by GPs, but are complex to diagnose due to language differences between the GP and patient, with few cultural-linguistic resources to assist. GPs require greater access to speech pathology supports, and further training to communicate effectively and distinguish ACD from other factors impacting on communication. GPs' deprioritisation of communication ability after brain injury has the potential to compound the level of disadvantage and disempowerment experienced by Aboriginal people.

## O.5.4
## Shifting values regarding diagnosis disclosure to the dying patient. A qualitative study of preferences and values of ethnic minority groups

**Roukayya Oueslati, Leiden Unviersity Medical Centre, Department of Ethics and Law of Health Care**
**Yvette van der Linden, Leiden University Medical Center, Centre of Expertise Palliative Care**
**Martine de Vries, Leiden Unviersity Medical Centre, Department of Ethics and Law of Health Care**
**Maria van den Muijsenbergh, Radboud University Medical Center**
**Dorothea Touwen, Leiden Unviersity Medical Centre, Department of Ethics and Law of Health Care**

Background: Ethnic minority groups in the Netherlands are expected to make more use of palliative care due to ageing. Studies indicate that disclosure to patients is not always appreciated within these groups. Since good physician-patient communication is associated with patient satisfaction, it is necessary to adapt disclosure to the preferences and values of these groups. Therefore, this studies aims at gaining deeper insight into preferences and values of ethnic minority groups regarding disclosure of a life threatening disease.

Methods: Qualitative semi-structured in-depth interviews were held with first and second generation respondents (n=45) with a Turkish, Moroccan, Dutch Antillean, Surinamese, and, Chinese background, who had various degrees of experience with palliative care. A purposeful sampling strategy was used for all ethnic groups, except for the Chinese. Due to a difficult access to this community a convenient sampling strategy was used. The data were transcribed verbatim and analysed using the thematic analysis.

Findings: Three important values were identified: self-determination, non-maleficence, and empathy. Overall, respondents stressed the right to self-determination and preferred empathic, step-wise disclosure, doing justice to self-determination as well as to non-maleficence. Especially a couple of first generation respondents mentioned non-maleficence in relation to non-disclosure. Self-determination and non-maleficence could become competing values for relatives in case of a language barrier between first generation patients and physicians. Also generation differences were found: second generation respondents mentioned disclosure should occur more careful to their parents than to themselves.

Discussion: Different preferences regarding disclosure among generations suggest a shift in values towards the Dutch practice. Individualized disclosure therefore better matches the preferences of ethnic minority groups. To do justice to the various wishes, patient's wishes regarding disclosure should preferably be discussed at the beginning of consultation.

## O.5.5
## Transcultural consultations for complex clinical cases: benefits for individual and institutional cultural competence

**Melissa Dominicé Dao, Geneva University Hospitals**
**Sophie Inglin, Independent researcher**
**Sarah Vilpert, Institute of Social and Preventive Medicine**
**Patricia Hudelson, Geneva University Hospitals**

Background: Caring for culturally diverse patients may present clinicians with challenges that may, if not addressed adequately, adversely affect the quality of health care. Clinicians often lack a framework to elicit cultural information and negotiate care across cultural differences. In a European urban teaching hospital, a transcultural consultation was created to provide direct support to clinicians encountering difficulties with culturally diverse patients.

Our evaluation aimed to document the types of difficulties for which clinicians requested transcultural support, to identify which salient clinical and cultural issues emerged through the process of the consultation and to assess the utility and impact of the transcultural consultation.

Methods: We conducted a mixed methods retrospective evaluation of intake forms and consultation reports from 236 transcultural consultations (2006-2015). We also questioned 51 clinicians about their experience and satisfaction with the consultation through semi-structured interviews. We performed quantitative and qualitative analysis to identify key patient, provider and consultation characteristics, main cross cultural care issues, and improvement propositions.

Findings: Requests for cultural consultations tended to involve situations with complex social, cultural and medical issues. All patients had a migration background, two-thirds spoke French less than fluently. Over half the cases demonstrated a high degree of social vulnerability that compromised illness management. Effective communication was hindered by language barriers and underestimated patient/provider differences in health-related knowledge and beliefs. Clinicians were highly satisfied with the consultation, and appreciated both the increased knowledge they gained of their patients' context and perspective and the opportunity to learn transferable skills.

Discussion: Transcultural consultations can contribute to institutional cultural competence by identifying the challenges of caring for diverse patient populations, the training needs of clinicians and the gaps in resource provision. Individual clinicians' cultural competence is also reinforced through the information, support and role

modeling provided by the cultural consultant. This evaluation lead us to increase educational offers and make more visible the available cross-cultural resources in our institution.

## O.6.1
## 'They speak in doctorish': Adolescents' perspectives of communicating with healthcare professionals

**Colleen O'Neill, Dublin City University**
**Briege Casey, Dublin City University**
**Veronica Lambert, Dublin City University**

Introduction: Chronic Kidney Disease (CKD) is a deteriorating condition without cure. In CKD the kidneys are permanently damaged and the person can no longer survive independently without renal replacement therapies such as dialysis or transplantation. Adolescents suffering from CKD have to cope with bodies that have been greatly changed by both disease and medical technologies. This research is part of a larger study, which explores the embodied experiences of adolescents living with CKD. This presentation will focus on one emergent theme related to adolescents' perspectives of how HCPs communicate with them during their illness trajectory.

Methods: Using a narrative study design, the stories of of five adolescents (10-17 years) living with CKD were gathered in both home and hospital contexts. Data collection took place over a prolonged period i.e. 18 months, which enabled in-depth accounts of adolescents' experiences to emerge. Multiple methods were used to collect data including body maps (life-size drawings of the body), informal conversations and observational field notes. The collective stories of the adolescents were analysed using Riesman's approach to narrative analysis

Findings: Findings revealed that adolescents felt frustrated and disappointed with their perceived level of engagement and interaction from healthcare professionals. Adolescents described how HCPs communication with them focused predominately on the medical aspects of their condition. HCPs use of medicalised language to explain complex and life-changing treatments alienated adolescents from engaging in conversations with HCPs.

Discussion: By focusing solely on the medical and technically aspects of treatment, HCPs neglect the illness experience from the adolescent perspective. HCPs need to communicate more effectively with adolescents in order to obtain a better understanding of the adolescents' world, their worries and concerns about their bodies. This can be accomplished by including adolescents in conversations about their illness and by avoiding an overly medicalised approach to care laden with complex medical terminology.

## O.6.2
## Communication themes and unmet communication needs identified in focus groups of white and African-American cancer survivors

**Theresa Hastert, Wayne State University School Of Medicine/Karmanos Cancer Institute**
**Lisa Berry-Bobovski, Wayne State University School Of Medicine/Karmanos Cancer Institute**
**Lorna Mabunda, Wayne State University School Of Medicine/Karmanos Cancer Institute**
**Susan Eggly, Wayne State University School Of Medicine/Karmanos Cancer Institute**

Background: In a focus group study of the financial consequences of cancer, several participants discussed the importance of communication and revealed unmet communication needs related to cancer treatment and its costs. To better understand these needs we re-coded the transcripts to identify communication-related themes among this survivor population.

Methods: We conducted 5 focus groups (2 among white and 3 among African-American survivors) in Detroit, Michigan in 2016. Survivors were recruited from participants in the Cancer Survivorship in Metropolitan Detroit cohort study and included adults diagnosed with breast, colorectal, lung, or prostate cancer since January 1, 2013. Each group included 4-6 survivors for a total of 25 participants. All focus groups were audio- and video-recorded. Verbatim transcripts were created from those recordings and coded for themes related to communication and unmet communication needs among cancer survivors using Dedoose.

Results: Survivors commonly described a need for self-advocacy with providers, hospitals, and insurers to receive their preferred treatment and to make payment arrangements when necessary. Both black and white survivors described a lack of communication and knowledge around the cost of treatment; however, white survivors more often described this as an unmet need while black survivors more often expressed that they did not want to know

about costs when making treatment decisions. Survivors with medically-complex cancer cases (i.e. lung cancer, later stage at diagnosis) expressed an unmet need of care coordination among oncology and other providers and described lack of coordination as leading to inappropriate care for side effects and medical needs not directly **related to cancer treatment because of their perception of general practitioners' fear of them as cancer patients.** Positive provider interactions (i.e. respecting/being respected by providers) were described with similar frequency among white and black survivors; however, black survivors described negative interactions about three times as often as white survivors.

Conclusions: Diverse cancer survivors expressed the importance of communication in obtaining appropriate cancer care, although some differences were observed by race. Effective communication is particularly important for patients with advanced cancer who rely on coordination between oncologists and other providers to receive appropriate care.

## O.6.3
## Do clinicians who value diverse perspectives communicate differently with patients?

**Somnath Saha, VA Portland Health Care System**
**Michele Massa, Johns Hopkins University**
**Dingfen Han, Johns Hopkins University**
**Tanita Woodson, Johns Hopkins University**
**Mary Catherine Beach, Johns Hopkins University**

Background: Previous studies have shown that clinicians who score high on a scale measuring the degree to which they value diverse patient perspectives are rated more highly by patients, but the underlying reasons for these findings are unclear. We hypothesized that clinicians who value diverse perspectives behave differently with patients and designed this study to evaluate the association of these clinician attitudes with their communication behaviors.

Methods: We enrolled 19 HIV clinicians and measured their self-reported endorsement of valuing diverse perspectives using a previously-validated scale consisting of 6 items (e.g. "Understanding a patient's values and beliefs is critical to providing effective care" and "Patients and doctors should be viewed as partners with equally valuable perspectives") rated on a 1-5 strongly agree to strongly disagree scale ($\alpha=0.72$, possible range 6-30). We then recorded these clinicians in 91 patient visits, and coded audio-recordings using the Roter Interaction Analysis System (RIAS). We used generalized estimating equations to account for clustering of patients within providers to assess the associations between providers' valuing diverse perspectives with communication behavior in the encounters.

Results: Most patients were male (74%) and identified as African American (61%). Most providers were female (79%) and identified as White (68%). Scores on the valuing diverse perspectives scale were high (mean=27.7, SD=1.95, range=22-30). Valuing diverse perspectives was not associated with visit length. Clinicians who scored higher on the valuing diverse perspectives scale were rated as having a more engaged emotional tone (p=0.045), engaged in more social chit chat (p<0.001), were more likely to make explicit reference to the patient's past personal or medical history (p=0.03), and had a trend towards engaging in more psychosocial talk (p=0.054). Scores on the valuing diverse perspectives scale were not associated with engagement in biomedical talk.

Conclusions: Clinicians who value diverse perspectives act in ways that seem consistent with those values. This suggests that communication training might be most effective if focused on improving both the attitudes and skills of clinicians and trainees.

## O.6.4
## Exploring older persons' expressed worries using a novel thematic approach

**Linda Hafskjold, Department of optometry, radiography and lighting design,  University College of Southeast Norway**
**Vibeke Sundling, Department of optometry, radiography and lighting design, Faculty of Health and Social Sciences, University College of Southeast Norway**
**Hilde Eide, Department of optometry, radiography and lighting design, Faculty of Health and Social Sciences, University College of Southeast Norway**

Introduction: This study aims to present the results of using a novel coding scheme that allows identification of patterns between how patients express worries in home care visits and the thematic content of the worry.

Methods: This exploratory, observational study of Norwegian home care visits is based on 638 patient-expressed worries (n=48 patients, ≥65 years) identified by the Verona Coding Definitions of Emotional Sequences (VR-CoDES) in 195 audio-recorded visits. To explore the thematic content of the expressions, a coding scheme was developed comprising four mutually exclusive main themes and nine sub-themes. The themes were based on the results of a content analysis completed on a sub-sample of the expressions (n=206). Two coders, independently, applied the coding scheme (12% of the material), and inter-rater reliability was tested using Cohen's kappa (κ). Group differences were analysed using Pearson's chi-squared test and adjusted residuals.

Results: The thematic coding scheme was successfully applied to all expressions in our material. Inter-rater agreement for both main themes (κ=0.68) and sub-themes (κ=0.64) showed substantial agreement. Overall, association was found between who initiated the expression of worry, whether spontaneously expressed by patient or solicited by nursing staff, and themes (Pearson Chi-Square, p<0,001), and between linguistic characteristics of the patient expressions and themes (Pearson Chi-Square, p<0,001). "Ageing and bodily impairment" was the most frequent theme of expressed worries, comprising 66% (421/638) of all cues/concerns. "Worries about Health care-related" issues comprised 15%, "Relationships with others" and "Life narratives and value issues" comprised 9%, respectively.

Discussion: Using the thematic coding scheme when analysing patient-expressed worries provides added value by making it possible to identify what patients' worry about and not only describe linguistic properties of worries as identified by VR-CoDES. In addition, combining the VR-CoDES with the thematic content allows for analysing linguistically how patients express a given theme of worry. Information about the relative frequency of thematic content may also indicate whether particular themes are especially prominent within a patient group or care setting. Our findings imply that it is important to address thematic content of patients' worries in communication training for students and nursing staff.


## O.6.5
## What does making informed decisions around hospice look like? Lessons from the admission consult

**Carey Candrian, University of Colorado School of Medicine**
**Jean Kutner, University of Colorado School of Medicine**
**Channing Tate, University of Colorado School of Medicine**
**Alexandra Tsantes, Rocky Mountain Cancer Center**
**Dan Matlock, University of Colorado School of Medicine**

Background: Hospice care for people near the end of life is associated with less distress, fewer hospitalizations, and improved caregiver outcomes. The decision to enroll in hospice, however, is complex and influenced by many factors including the individuals' and family's understanding of hospice care, emotions and fear, cultural and religious beliefs, and acceptance of terminal diagnosis. Although 40% of all decedents in the U.S. are under the care of hospice, an estimated 10-15% of individuals who enroll with hospice subsequently disenroll prior to death often due to not understanding hospice. The objective of this research presentation is to enhance clinician understandings of patient and caregiver expectations and needs during the hospice admission consult.

Methods: This was a qualitative study using critical discourse analysis. Participants were from a large non-profit hospice; observation settings included: home, hospital and skill nursing facility. Study data includes 60 hours of observation including interviews with 15 family caregivers, 6 patients and 9 hospice admission nurses (n=30).

Findings: Four themes were identified: (1) Wide variation in knowledge about hospice prior to the admission consult, (2) competing expectations and objectives for the admission consult, (3) organizational influences around the goals of the admission consult, (4) importance of integrating the patient and caregiver perspective to improve the quality of the admission consult.

Discussion: Hospice eligibility criteria and the services provided are inconsistently explained and misunderstood. With the ubiquitous challenges surrounding hospice admission consults, communication guidelines for hospice nurses to support patients and caregivers are needed. Providing complete and accurate information during the hospice admission process is necessary so that patients and their caregivers can make informed decisions around transitioning to hospice and minimize misinformed expectations.

## O.7.1
## Measuring shared decision making in oncology: Development of the iSHARE questionnaires

**Hanna Bomhof-Roordink, Department of Biomedical Data Sciences, Leiden University Medical Center**
**Fania R. Gaertner, Department of Biomedical Data Sciences, Leiden University Medical Center**
**Anne M. Stiggelbout, Department of Biomedical Data Sciences, Leiden University Medical Center**
**Arwen H. Pieterse, Department of Biomedical Data Sciences, Leiden University Medical Center**

Background:  To 1) determine the construct of shared decision making (SDM) for oncology, 2) develop a patient and oncologist questionnaire to measure SDM, and 3) determine their content validity and comprehensibility.

Methods:  The construct was defined  based on a systematic literature review of conceptual models of SDM, a newly-developed model of SDM in oncology that was based on a large qualitative study among stakeholders, and input from five international SDM-experts. We selected the elements most typical for SDM from these sources, and formulated items for each element. International SDM-experts, cancer patients and oncologists rated content validity in an online questionnaire. We assumed a formative measurement model, i.e., the  items are not necessarily closely associated. Item reduction then cannot be conducted based on factor analysis, so we asked cancer patients in an online field-test to indicate the most important item per element, to inform further item reduction. Comprehension of the items was tested in cycles of cognitive interviews with cancer patients and oncologists.

Findings:  We identified 17 elements based on the literature, the newly-developed model and expert opinion, and developed 153 corresponding items. Content validity was rated on item level in two cycles by five SDM-experts and 12 cancer patients and we arrived at a selection of 19 elements and 66 items. Subsequently, oncologists rated content validity on element level. Combining these results with those from the field-test among 131 cancer patients, we narrowed the selection down to 14 elements and 24 items. Next, cognitive interviews were held with nine patients and five oncologists, and  items were removed, adapted and tested further. The final patient and oncologist questionnaires each contain the same 15 items, three of which explicitly assess patient behavior, and phrased according to the target group. A six-point response format was chosen, ranging from 'Not done at all' to 'Done completely'.

Discussion:  This study provides a short patient and oncologist questionnaire to measure SDM in oncology, based on a clearly defined construct and a thorough development process. It assesses both oncologist and patient behaviors, and focuses on the SDM-process rather than on one consultation.

## O.7.2
## It's rarely one clinician, one consultation, one decision: the challenges of measuring shared decision making.

**Denitza Williams, Cardiff University**
**Natalie Joseph-Williams, Cardiff University**
**Fiona Wood, Cardiff University**
**Kate Brain, Cardiff University**
**Amy Lloyd, Cardiff University**
**Adrian Edwards, Cardiff University**

Background:  There is strong policy support for shared decision making (SDM), and measurement has been identified as a priority area for implementation in practice. Clinicians and managers implementing SDM want to know what difference it makes to patients and its effects on clinical practice. We conducted a study which aimed to understand what actually happens in real-life SDM consultations. This presentation reflects on some of the measurement issues we confronted.

Methods:  We recruited a purposive sample of patients considering treatment options from breast cancer and renal clinics in Cardiff and Vale University Health Board, Wales, UK. Both clinics had implemented an SDM approach for several years. Clinicians and patients rated their experiences of SDM after their consultations using a dyadic self-reported questionnaire ("SureScore"), and consultations were audio-recorded and scored using observer-OPTION5.

Findings:  Twenty-two breast and 21 renal consultations were scored using SureScore and OPTION5. SureScore indicated that both clinicians and patients felt SDM was occurring, but scores showed ceiling effects for most participants, making differentiation difficult. There was some mismatch between SureScore and OPTION5 score data, which showed that each consultation lacked at least some elements of SDM. Highest scoring items for

OPTION5 were "incorporating patient preference into decisions" for the breast team (mean 92.5, range 62.5-100, S.D. 11.96) and "eliciting patient preferences to options" for the renal team (mean 80.76, range 50-100, S.D. 17.40). Where OPTION5 scores were low for a particular item, it was not known whether discussion about this item had occurred in previous interactions.

Conclusion: SDM is distributed, multi-staged and context-specific. Self-reported questionnaires can broadly inform us if patients/clinicians felt satisfied with the SDM process, but are unable to tell us about the quality of the interaction and are unlikely to capture the multi-staged nature of the SDM process. Observational measures provide an indication of the extent to which elements of SDM are present in the observed consultation, but cannot explain why some elements of SDM might not be present or scored lower. Findings are important for consideration when measuring SDM in settings characterised by management over several consultations, and with multiple staff members.

## O.7.3
## Reflecting on shared decision making: a reflection-quantification study

**Marleen Kunneman, Knowledge and Evaluation Research (KER) Unit, Mayo Clinic**
**Ian G. Hargraves, Knowledge and Evaluation Research (KER) Unit, Mayo Clinic**
**Megan E. Branda, Knowledge and Evaluation Research (KER) Unit, Mayo Clinic**
**Naykky Singh Ospina, Division of Endocrinology, Diabetes and Metabolism, University of Florida**
**Abd M. Abu Dabrh, Family Medicine, Mayo Clinic**
**Kathleen J. Yost, Health Services Research, Mayo Clinic**
**Richard M. Frankel, Indiana University School of Medicine**
**Victor M. Montori, Knowledge and Evaluation Research (KER) Unit, Mayo Clinic**

Background: Patient self-reported measures of shared decision making (SDM) are limited by ceiling and halo effects. Asking patients to reflect on their encounter(s) may help them consider more closely the quality of SDM beyond general satisfaction. The aim of this study was to assess whether reflection can improve the validity and responsiveness of patient-reported SDM evaluations.

Methods: We conducted a patient-level multicenter randomized trial. We recruited patients seeing their family physician or endocrinologist. We compared SDM as measured by CollaboRATE (3- items on 0-9 scale, total score range 0-27, reported by calculating percentage of top scores) with and without preceding reflection questions. Five open-ended reflection questions addressed what about the conversation went well and what could be improved upon, signs that the clinician understood the patient's situation, how the situation was addressed, and why that makes sense. A linear analogue self-assessment scale assessed how much sense the plan of care makes (0 "As little as can be" to 10 "As much as can be"). We compared the distribution of SDM questionnaire responses between arms and will qualitatively analyze patients' written reflections to understand congruence, or lack thereof, between their narrative and numerical responses.

Findings: Of 127 surveys, 107 were completed (response rate 84%); 59 patients responded that no decisions were made during the encounter and 43 reported on SDM. CollaboRATE had lower median total scores when it was preceded by reflection questions than when it was not (24 vs 27 out of a maximum score of 27). Also, it had lower end of the interquartile ranges (20 vs 24.5), and lower top scores (36% vs 63%).

By the end of February 2018, we will have completed 300 surveys from three medical centers. Final results of the comparisons and qualitative analysis will be presented.

Conclusion: Our results suggest that numerical ratings of SDM may be affected by preceding reflection questions, which may address the problems of ceiling and halo effects. Narratives may provide further insight into the reasons patients have for valuing the SDM process. If confirmed, these findings would contribute to improving patient self-reported SDM and its measurement properties.

## O.7.4
## The dyadic nature of existing SDM instruments

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**Anne Stiggelbout, Medical Decision Making, Department of Biomedical Data Sciences, Leiden University Medical Center**
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Objective: Researchers call for a broader scope in conceptualizing and measuring shared decision making (SDM) to better acknowledge the dyadic nature of SDM. Proposed shifts concern 1) focusing on both provider and patient behavior, 2) focusing on the decision process instead of the consultation, and 3) considering multiple perspectives when measuring SDM. We aim to inventory how these three aspects have been handled within existing SDM instruments.

Method: We performed secondary analyses on data from a recent systematic review on the measurement quality of SDM instruments. For all unique SDM instruments (most recent version in the original language) we assessed i) the actor of the operationalization (provider and/or patient and/or patient-provider dyad), and ii) the unit of analysis (consultation or decision). Additionally, for instruments that include measurements from multiple perspectives, so-called "dyadic instruments", we inventoried i) how authors defined "dyadic", ii) which assumptions underlie these instruments, and iii) how scores from the different perspectives are integrated into one SDM score.

Results: We identified 22 unique SDM instruments: 8 patient questionnaires, 11 coding schemes, and 3 dyadic instruments. Five instruments included more than one actor in their item set. Overall, 18 instruments included the provider as actor in their operationalization, six the patient, and five the patient-provider dyad. Most instruments (17/23) used the consultation as the unit of analysis, three used the decision as the unit of analysis, and two asked for a generic evaluation of care from one provider.

The three dyadic instruments each included the patient and provider perspective and one additionally included the observer perspective. None defined "dyadic", each assumed that identical items should be used for all perspectives, and for one instrument a composite score calculation was provided.

Conclusion: To a large extent, existing SDM instruments neglect patients' role when measuring SDM, as well as patients' and/or providers' behaviors outside the consultation. Dyadic instrument developers have missed the opportunity to clarify what dyadic entails and to provide instructions for the integration of perspectives in a final score. Adaptation of SDM instruments or development of new ones is needed, to fully acknowledge the dyadic nature when measuring SDM.

# Symposia

## S.1
## PLACE4CARERS: Caregiver engagement to improve ageing in place for hard-to-reach communities

**Guendalina Graffigna, Universita' Cattolica Del Sacro Cuore**
**Maria Mayan, Community-University Partnership for the Study of Children, Youth and Families - Faculty of Extension, University of Alberta**
**Aslak Steinsbekk, NTNU Norwegian University of Science and Technology**
**Serena Barello, Universita' Cattolica Del Sacro Cuore**
**Roberta Ferrari, Azienda Territoriale per i Servizi alla Persona**
**Massimo Corbo, Need Institute**
**Cristina Masella, Department of Management, Economics & Industrial Engineering, Politecnico di Milano**
**Ana M Carriazo, Regional Ministry of Health of Andalusia**

"Ageing-in-place", that elderly stay at home as long as possible, is recognized as a crucial strategy to improve the quality of life of elderly citizens as well as the sustainability of social and welfare systems. However, although scholars agree that physical and social contexts impact the ageing process, there is a dearth of knowledge on the role of the car givers and particular their role in the ageing process in hard-toreach areas, Neither are there models on how to engage caregivers to support aging in these contexts. Engaging family caregivers in the care network could be a critical asset to make the "ageing-in-place" imperative a reality. Scholars have described family caregivers as the invisible backbone of the whole social and welfare system. Family caregivers do not only provide daily assistance, but also play a pivotal role in linking and integrating the different actors and services that attend to the various needs of elderly citizens. This is particularly evident in remote and rural areas, where family caregivers – if effectively engaged – can fill the gaps that exist due to the fragmentation of the social and welfare system. However, to date, there is little knowledge about family caregivers' of elderly citizens unique needs and expectations towards health and care services and scarce attentions has been devoted to their perspectives and communication needs in the healthcare environment. What type of social support. informative support or community services are needed to best facilitate caregivers in effectively engage their crucial role and to make the "ageing-in-place" requirement feasible and sustainable.

Appropriate engagement and tailored support of caregivers have the potential to: a) improve caregivers experiences and quality of life, b) facilitate shared decision-making between families and systems, c) enhance the quality of care for the elderly, d) reduce the unnecessary use of health and social services, and e) increase the effectiveness of health and social care interventions. Furthermore, supporting the role of informal carers (family and friends providing mostly unpaid care to frail seniors) is important to provide an adequate continuum of care between informal and formal care, particularly in hard-to-reach communities.

Rationale:

The healthcare system in the Western countries has, partly due to the success of specialization, grown increasingly fragmented and difficult to navigate above all for comunities "at-the-margins". The concept of family caregiver engagement offers an opportunity to challenge the status quo of welfare systems, particularly for hard-to-reach communities. This symposium will be a foundation for a discussion on family caregiver engagement as well as at the same time offering empirically grounded research and perspectives on this issue.

For each speaker:

Contribution 1 – The notion of "engagement" is proliferating across the academy, governments, and communities as a way to tackle society's most intractable health and social issues. But engagement often occurs with individuals and communities who do not have significant barriers to their participation and is frequently directed and completed according to the preferences of academics and their funders. In this session, we will learn more about strategies for engaging harder to reach individuals and communities, with a specific focus on the elderly and their caregivers, so that our collective work may result in relevant changes that will ultimately improve everyday life for individuals, families, and communities.

Contribution 2 – Different types of social and care pathways has emerged as a solution to improve timely and high quality service delivery. Such pathways are organised around the services, giving the different services a clearly defined role. However, caregivers, who should support the person going through the pathway is not given a role. The presentation will discuss if bottom up service design can be used to engage caregivers, using a generic pathway developed for elderly persons as an example.

Contribution 3 – The current social and political context is generating social and health inequalities. Patient and family engagement offers a promising pathway toward better-quality health care, more-efficient care, and improved population health. This contribution will present a eHealth project dedicated to engaging family caregivers over the last ten years in Andalusia. The presenter will also discuss the levels at which patient and caregiver engagement can be incorporated into governance and policy making.

Contribution 4 – The un-met needs and expectations of family members along their experience of caring for elderly need to be listened and considered in order to sustain their engagement. Particularly caregiver engagement is a complex psychologic process which implies individual adaptation and elaboration of a new socio-psychological role requirements: the role of caregivers. In this contribute we will describe the psychological framework of the **Caregiving Engagement Model to understand, assess and support family members' engagement** experiences.

Contribution 5 – This contribute reports on the first results of the ongoing Place4Carers Project: a participatory action research aimed to explore, understand and measure the needs of education, welfare, assistance and social inclusion of family caregivers of elderly citizens in Valcamonica, a mountainous territory in the northern part of the Lombardy Region (Italy). The project is conceived as a co-creation experience to co-design a new welfare service for family caregiver able to improve their engagement.

Qualification of submitters

**The Chair of the symposium's research** and scientific activities are mainly devoted to patient engagement in health and wellbeing. She has spent the last 15 years of activity in constructing bridges between scientific/academic knowledge in this field. In 2014 she validated the PATIENT HEALTH ENGAGEMENT Scale: a measure of the patients' psychological experience of engagement in chronic care. In 2017 she coordinated the First Italian Consensus Conference on Patient Engagement to define shared recommendation to orient policies and practices for patient engagement.  The first presenter is a community-based researcher and a qualitative methodologist. Her community-based research interests are in the area of partnerships and knowledge translation and how citizens, community-organizations, clinicians, governments and universities can work together to address disparities and improve health outcomes. Maria frames all of her research from this community-based research orientation and in particular, enjoys putting her efforts into poverty reduction and hard-to-reach communities inclusion.

The second presenter is a professor in behavioral sciences in medicine and health service research at the Department of Public Health and General Practice, Norwegian University of Science and Technology. His main research activities at current centers around health service research with a focus on the patient perspective and how patients experience the complete package of services they use

The third presenter is a policy making involved in the European discussion about healthy and active ageing and on the improvement of engagement of patients and their family. She has a key role in the Regional Ministry of Health of Andalusia, Spain

The fourth presenter has conducted a large amount of research on patient and family caregiver engagement by deepening the inner experience and unmet needs of these actors in the health and care process. Currently, she takes national and international conferences and lectures on this topic and published more that 60 scientific papers with this focus.

The fifth presenter has a long expertise in the evaluation and management and innovation of health and social sectors. She has studied the managerial implication of patients and family empowerment in the design of healthcare and social sector in several Regions of Italy. She is a partner of the Place4Carer Project.

**S.2**
**Uncertainty in healthcare:  building a research program and community**

**Paul Han, Maine Medical Center**
**Austin Babrow, Ohio University**
**Marij Hillen, Academic Medical Center-University of Amsterdam**
**Pål Gulbrandsen, University of Oslo**
**Ellen Smets, Academic Medical Center-University of Amsterdam**
**Eirik Ofstad, UiT the Arctic University of Norway**

Rationale

Uncertainty is a pervasive, important problem in healthcare.  Yet our understanding of this problem has been limited by the nature of past research, which has been scattered across different disciplines and conducted by investigators working independently, using different theoretical frameworks and measures.  This symposium will explore how to address these problems.  We will identify important directions for future work, and advocate for

developing a systematic, interdisciplinary, collaborative research program. We hope to stimulate interest among attendees in building this program.

Program

Introduction: Conceptualizing and investigating uncertainty in health care

(12 minutes). Uncertainty in healthcare arises from numerous sources, pertains to numerous issues, and has numerous effects on clinicians, patients, and health outcomes. This presentation will discuss the nature of uncertainty in healthcare and present a conceptual framework for understanding and investigating its sources and effects. It will provide an overview of important unanswered research questions, and identify barriers to addressing these questions.

Presenter information: The presenter has conducted several conceptual and empirical research studies examining the nature, communication, and management of uncertainty in healthcare.

Communication theory in studies of uncertainty in illness (12 minutes). Despite its centrality to health care, "uncertainty" did not become a Medical Subject Heading term in PubMed, the largest health-related database in the world, until 2003. Research has begun to illuminate the topic, but much remains to be learned, particularly about the intersection of illness, uncertainty, and communication. This presentation will discuss largely unseen opportunities to improve theory and practice by infusing work on uncertainty in medicine and nursing with communication theory.

Presenter information: The presenter has published widely on communication and uncertainty in illness for over 20 years.

Uncertainty tolerance in health care (12 minutes). An important aspect of uncertainty in healthcare is patients' and providers' capacity to tolerate uncertainty. Uncertainty tolerance determines people's cognitive, affective (anxiety vs. comfort) and behavioral responses to uncertainty. People's uncertainty tolerance may strongly influence the physician-patient relationship, information seeking and provision, and decision making. This presentation will discuss the state of the evidence on uncertainty tolerance and provide suggestions on how to move the field forward.

Presenter information: The presenter has conducted several studies on uncertainty and uncertainty tolerance in health care.

Physicians' responses to uncertainty (12 minutes). Uncertainty is an unavoidable problem in healthcare, and addressing this problem requires distinguishing between the cognitive fact that the future is unpredictable (uncertainty), and the emotions this fact elicits (insecurity, fear, anxiety). How can physicians deal with uncertainty in a way that fosters feelings of safety, for themselves and their patients? This presentation will explore actions physicians take to alleviate uncertainty, their perceptions, feelings, and fears regarding uncertainty, and their strategies for handling these fears.

Presenter information: The presenter has published extensively on the physician-patient relationship, clinical communication, and shared decision-making.

Uncertainty communication and patient outcomes (12 minutes). Little guidance exists on how to discuss uncertainties in a way that empowers patients without increasing their anxiety or damaging the patient-physician relationship. Data will be presented on a) how uncertainty is conveyed in clinical consultations and b) the effect thereof on relevant patient outcomes. This presentation will explore ways to teach healthcare professionals appropriate communication skills that can lead to positive outcomes from admitting uncertainty.

Presenter information: The presenter has a track record in observational and experimental studies addressing doctor-patient communication, with a focus on information provision in the context of decision making.

Future directions: group discussion (30 minutes). Interactive group discussion will focus on generating ideas for advancing research on uncertainty in health care, and building interest among attendees for future collaborative work.

# Workshops

**W.1**
**'Double Act' - Maximising the partnership potential of facilitator and simulated patient during experiential communication skills teaching**

**Sandra Winterburn, Norwich Medical School, University of East Anglia**
**Jonathan Silverman, Deakin University**
**Kim Taylor, University of Cambridge**
**Alan Rubin, University of Vermont**

Rationale: The inclusion of Simulated Patients (SPs) in health professional communication skills teaching (CST) is growing internationally. Whilst it is common practice to focus on the recruitment and initial training of SPs, there is also a need to consider the specific skills and strategies that empower facilitators and SPs to work together effectively "in the moment" within experiential sessions and enable facilitators to help 'redirect' SPs during roleplays.

This workshop aims to increase the confidence of participants (facilitators and SPs), equipping them with practical solutions to address common challenges that arise during role play, maximising the impact of SPs and enhancing the overall learning for participants.

Learning objectives: By the end of this workshop, participants will be able to:

- recognise the main challenges for facilitators and SPs working in partnership during experiential CST

- describe a range of skills & strategies enabling facilitators and SPs to work collaboratively in sessions e.g.

    o overt and covert communication between SP and facilitator,

    o managing vague or generalised feedback

    o ensuring the individual learner's agenda is prioritised to maximise learning

    o ensuring a win in re-rehearsal

    o calibrating emotion

    o handling critical feedback

Teaching methods/activities: This workshop will use a variety of interactive methods to explore these issues:

09.00 Brief introductions of facilitators and workshop objectives
09:05 Participant introductions (show of hands)
09:10 Small group work: identify common challenges from own practice of facilitators working with SPs during experiential teaching. What interferes with optimal learning in experiential sessions? What are the behaviours in SPs and facilitators that act as enablers or barriers?
09:25 Groups display and compare flipcharts
09:30 Facilitators summarise themes and link to workshop objectives
09:35 Interactive demonstrations covering three of the most common challenges (15 mins per challenge). Each challenge will be demonstrated, then participants in pairs will discuss changes to maximise the learning potential of the roleplay and new strategies and skills will be tried as suggested.
10:20 Evaluation. Each participant will identify main take home points with participant's most important learning point and action-plan being emailed back to them in 8 weeks.
10:30 Close

**W.2**
**How to make information leaflets with images for low-literate patients**

**Mara Van Beusekom, School of Medicine, University Of St Andrews**

Rationale: Low literacy is a global challenge – in the context of healthcare, we see that low-literate patients are at increased risk of misinterpreting medication instructions and of experiencing adverse health events. In a system where patients are increasingly expected to play an active role, it is essential that patients with lower literacy levels are offered the right tools to inform themselves about their health, illness and therapy. Printed leaflets remain an indispensable medium to ensure that information is accessible and available to all patients.

Learning objectives: In this session, participants will learn how to design educational materials for low-literate patients, with a focus on the various roles that images can play to support textual information and on good practice for the design of such images. As a result, participants will be able to:

- Recognise issues regarding information design for low-literate patients

- Describe ways in which images can support information

- Apply design guidelines for low-literate audiences to create or select appropriate materials

- Demonstrate skills in organising visual and textual information into a health leaflet

Teaching methods: The workshop starts with introductions and an icebreaker (10 minutes), followed by a discussion on the main challenges regarding health information for low-literate patients (5 mins in pairs; 5 mins with whole group) and a short brief on this topic (10 mins). Sample information is examined and discussed in small groups (10 mins). Potential roles of visual aids are considered and collected by the group (10 mins), followed by a brief on best practice regarding the design of images for low-literate audiences (10 mins). Participants are then encouraged to apply their newly-acquired skills to their own materials or to sample materials that are provided (15 mins + 5 mins reflection).

Evaluation of outcomes: Participants write down their take-home messages from the session and share them with the group (10 mins).

## W.3
## Problem-Based Learning of Shared Decision Making by Designing Decision Aids with Medical Students

**Ian Hargraves, Mayo Clinic**
**Kasey Boehmer, Mayo Clinic**
**Summer Allen, Mayo Clinic**
**Kevin Shaw, Mayo Clinic**
**Juan Pablo Brito, Mayo Clinic**

Rationale: Shared Decision Making (SDM) is not the use of decision aids. The idea that it is common in practice and education.

Paradoxically, we have found that leading third year medical students through the process of designing decision aids is a helpful approach to forming a more nuanced understanding of, and facility with, SDM. Because a Problem-Based Design approach focuses on how SDM is used and its purpose in care, designing decision aids is a novel hands-on way of engaging students in these issues.

In our three-year experience within the Mayo Medical School, we have observed in students a greater appreciation of:

- The communicative and care work undertaken by patients and clinicians as they make decisions

- How SDM is made appropriate for different patients and situations

- The limited but helpful role that decision aids have within SDM

- The insufficiency of:

- Being bio-medically comprehensive in information sharing

  - Solely presenting medical information in a patient-friendly manner and inviting patient participation.

  - Information and style in communication (including interpersonal communication) should be formed with patients so that it is relevant to, productive for, and respectful of, patient-centered decision making. These are skills that students can employ without the assistance of decision aids.

Learning Objectives:  Practical experience in supporting students in learning SDM by designing and trying out how their decision aids can be purposefully used in particular medical situations.

Teaching Methods:

| | |
|---|---|
| Introductions | 5 Mins |
| Brief survey of challenges in teaching students SDM, and Design's Problem-Based potential to complement existing educational strategies | 10 Mins |
| Team-based, hands-on simulation of students' learning experience, structured by functions that decision aids are designed to support:<br><br>I.   Supporting relationships<br><br>II.   Moving beyond medical problem formulations to significant practical and emotional problems in patient illness and treatment experience<br><br>III.   Finding potential ways with patients to better their situation<br><br>IV.   Working through with patients which options best address their situation, can be implemented, and reflect their values<br><br>V.   Shaping a plan of care | 60 Mins |
| Evaluation | |
| Group reflection and discussion of ideas for how to incorporate this experience in curricula | 15 Mins |

## W.4
## Set-up for success: The requirements for the effective delivery of communication in healthcare events

## Megan Chiswell, Cancer Council Victoria

Rationale:  In healthcare and education, the requirement to do more with less means that sometimes as individuals and teams we are working outside our core skill set. Mechanisms for sharing research, delivering education and translating theory to practice may be considered as events.  These events may include conferences, forums, facilitated networking, education sessions, professional development activities and implementation workshops.

As teachers, researchers and policy makers we may not have the skills and knowledge required for effective events management to:

- Plan an event, from inception through to delivery and evaluation

- Identify potential funding sources and seek funding

- Develop budgets, model costs or design fee-for-service models

- Identify stakeholders  and develop  stakeholder messaging

- Design marketing collateral and a communications strategy

- Mitigate risk, scale events and consider sustainability

- By considering our work from an events management perspective, there is potential to maximise impact and minimise risk.

Learning Objectives:  In this workshop, participants will consider the elements required to deliver a successful communication in healthcare event.

At the end of this workshop, participants will have:

- Conceptualised a communication in healthcare event for a target audience

- Participated in peer facilitated process to refine key elements of the event

- Identified key stakeholders essential to the success of the event, their drivers and stakeholder messaging

- Considered the true financial cost of event delivery, and options for funding

- Identified potential approaches for promotion and communications

Teaching Methods: This workshop will be interactive, supported by shared experiences of the group and case studies and templates from the organisers.

| Time | Activity |
|---|---|
| 10 minutes | Introduction of workshop |
| | Introductory  participant rounds |
| | Sharing of individual agendas |
| | Discussion of workshop format, and alignment with individual agendas |
| 15 minutes | Case study activity – Communication in Healthcare Conference OR Three Day Residential Retreat (small group work) |
| (10 minutes) | Form small groups and examine either the case study of a conference or an education event and identify key elements for success. Individuals to identify  top tips that may be relevant for individual events |
| (5 minutes) | Reporting back to the group, key elements for consideration when developing strategic blue print.  Documented on whiteboard for use by group. |
| 15 minutes | Development of conceptual plan for communication in healthcare event. |
| (10 minutes) | Completion of a template. |
| (5 minutes) | Peer review. |
| | Break |
| 15 minutes | Stakeholder mapping activity – identification of stakeholders, assessment of influence, and development of stakeholder messaging. |
| | Completion of a templates, and communication strategy tick sheet |
| 20 minutes | Funding, budgets and fee-for-service discussion and provision of appropriate templates |
| 10 minutes | Summary group learnings |
| | Individual next steps round |
| | Wrap up |

# Works in Progress Oral Presentations

**WIP.1.1**
**Deciding for others: family members' experiences of decision-making for research involving patients who lack capacity to consent**

**Victoria Shepherd, Cardiff University**

Background: Research involving those who lack capacity to consent can be challenging. Patients with significant cognitive impairment who lack the capacity to make their own decisions about research participation rely on family members to make decisions on their behalf as their 'proxy' or 'surrogate'. The role of the proxy is to advise researchers about the person's prior wishes and feelings and whether they would have wanted to take part in the research, and to protect their interests. However, it can be a burdensome and difficult task. Little is known about families' perspectives and experiences of proxy decision-making for research, or how decisions are made. There is a lack of information or support available for relatives and friends acting as research proxies.

The aim of the study is to explore family members/friends' experiences of making decisions for research involving an adult lacking capacity. The objective is to gain an understanding of proxy decision-making for research participation in order to develop a theoretical framework, and develop future decision support interventions.

Methods: Semi-structured interviews will be conducted with 20-25 family members or friends who have acted as a research proxy for someone who lacks capacity. The interviews will be digitally audio-recorded with consent, and transcribed verbatim. The topic guide will include exploration of relevant contextual issues, the basis for decision-making, and probes for eliciting any relevant variables. The interviews will also be used to develop and refine a novel theoretical framework. Thematic analysis will be used, through Braun and Clarke's approach involving a (recursive) six-phase process: familiarisation with the data, code generation, searching for themes, reviewing potential themes, defining and naming themes, and reporting.

Preliminary findings: Data collection is ongoing.

Preliminary implications of research: Preliminary findings will be discussed.

Request for feedback: This study involves unique challenges, with two inter-woven layers of decision-making requiring exploration: the participant's own decision, and their (re)creation of what the person themselves would have decided if they were able to do so, which may form the basis for their own decision. Feedback on exploring family perspectives and decision-making biases during in-depth interviews, and developing a framework, is welcomed.

**WIP.1.2**
**Developing a Childhood Vaccination Survey to Measure Expectant Mothers' Knowledge and Behaviors**

**Amanda Bradshaw, University of Florida**
**Virginia Dodd, University of Florida**

Background: Childhood vaccine decision making begins during pregnancy (Danchin et al., 2017), but vaccination education has not been successfully integrated into routine obstetric care or prenatal visits (Návar, Halsey, Carter, Montgomery, & Salmon, 2007). Limited research exists examining the knowledge, attitudes, and beliefs of pregnant women in making childhood vaccination decisions.

The American Academy of Pediatrics recommends infants receive two crucial vaccines within the first 24 hours of life. In the absence of scientifically-based information from a medical provider while the baby is in utero, new mothers are often faced with making a spontaneous decision in the delivery room relying upon gut instinct or advice from one's social network thus leading to increased vaccine hesitancy, delays, and deviations from the recommended vaccination schedule (Weiner, Fisher, Nowak, Basket, & Gellin, 2015).

Methods: There is a clear need to reassess existing survey validity and reliability and develop specifically tailored, clear, meaningful questions based upon insights from focus groups and individual in-depth interviews with 100 participants in the target population about their information seeking behavior.

The purpose of this longitudinal study, modeled after (Dodd, Iii, & Logan, 2012), and based upon the Elaboration Likelihood Model (ELM) theoretical framework (Petty & Cacioppo, 1984) is threefold- 1) Develop a quantitative survey to assess the attitudes and subsequent behavior of expectant mothers about childhood vaccination 2) Field test and establish test-retest reliability with the newly developed instrument 3) Utilize insights from qualitative and quantitative research to develop a campaign for childhood vaccination to pre-test in an obstetrics care setting.

Preliminary Implications of Research:  The first step of gleaning insight into maternal decision making about childhood vaccinations during pregnancy may help healthcare providers to reduce childhood vaccine hesitancy among expectant mothers and prime them to make informed decisions, eventually leading to increased vaccination uptake.

Request for Feedback:  Feedback is requested to critique the project design and recommend incorporation of additional approaches and/or theoretical framework to make this analysis useful and practical for a variety of stakeholders.

## WIP.1.3
## Exploring Decision-Making about Fertility Preservation- Retrospective Reflections of Cancer Patients and Survivors

**Sanjana Ramesh, Northwestern University**
**Courtney Scherr, Northwestern University**
**Hannah Badal, Northwestern University**

Background: Some cancers and associated gonadtoxic treatments have the potential to compromise fertility. Decisions about fertility preservation at the time of a cancer diagnosis are challenging. The primary objective of this study is to explore decisionmaking about fertility preservation among cancer patients and survivors of reproductive age. The aims of this study include 1) to analyze responses to a decisional conflict scale, and 2) develop a model of cancer patients' experiences related to decision making about fertility preservation.

Methods: Male and female oncology patients were recruited by email and completed an online survey (N=65) and semi-structured phone interview (n=50). The survey included basic and clinical demographics, and a validated decisional conflict scale. The interview guide included questions about decision-making and regret. Basic descriptive and a Mann-Whitney U Tests will be conducted to assess differences in DCS total and subscale scores based on demographic variables, and a multivariate linear regression will be conducted to analyze co-variate predictors of decisional conflict. Two study team members used iterative qualitative analysis to identify segments of conversation related to decision-making, decisional conflict, and regret or satisfaction.

Preliminary findings:  Our preliminary quantitative analysis revealed low decisional conflict related to fertility preservation. However, our preliminary qualitative analysis suggested some patients' experienced decisional conflict, and more importantly, regret. Male patients, those with children at diagnosis, or who successfully conceived after diagnosis were more satisfied with their decision and experienced less regret.

Preliminary implications of research:  Retrospectively evaluating fertility preservation decisions made by patients during a cancer diagnosis offers additional investigation to understand how to communicate options and support patients.

Request for feedback:  What are the best covariates to include in our multivariable linear regression model? Is it acceptable to measure decisional conflict retrospectively? We hope to implement change in clinical practice based on our findings, what are some suggestions to ensure effective implementation?

## WIP.1.4
## Family Centered Rounds in the Pediatric Intensive Care Unit – Impact on Family Understanding

**April Edwell, University Of California San Francisco, Department of Pediatrics**
**Sandrijn van Schaik, University Of California San Francisco, Department of Pediatrics**

Background:  The objective of this project is to explore the experiences of families with Family Centered Rounding (FCR) in the Pediatric Intensive Care Unit (PICU) and examine how FCR impacts families' understanding of the care being provided to their child. More specifically, to examine whether FCR contributes effectively to family understanding of illness severity and disease management and to explore if family presence during FCR is associated with provider-family concordance regarding prognosis and illness severity.

As models of improving health care have shifted over time, there has been an increasing emphasis on the importance of good communication between health care providers and patients and their families. This has led many organizations to emphasize that the communication in a health care exchange ought to be patient/family centered, including rounds.

While the positive effect of FCR on family satisfaction has been well documented in several contexts, what is less clear is what, if any, effect FCR has on family understanding of illness severity and disease management.

Methods: I will take a mixed methods approach utilizing both surveys and semi-structured interviews of parents whose child has been admitted to the PICU and of the health care providers caring for the child based upon previously validated surveys and interview guides. I will conduct the study in two PICUs in northern California, UCSF Benioff Children's Hospital and UCSF Children's Hospital Oakland. The health care providers I will involve will include critical care physicians and nurses caring for the patients selected.

Preliminary findings: N/A

Potential implications of research: This study will help elucidate other ramifications of Family Centered Rounds in the PICU setting beyond satisfaction. It will help explore whether or not there are associations between FCR and family understanding of illness severity and prognosis which could further inform how we communicate with families of ill children going forward.

Request for feedback: I would particularly like feedback about questions on which I should focus in the semi structured interview and the survey. This would be particularly useful in honing what potentially could be a very broad topic.

## WIP.1.5
## Fertility Preservation Counseling Information Satisfaction and Needs among Oncology Patients

**Hannah Badal, Northwestern University**
**Courtney Scherr, Northwestern University**
**Sanjana Ramesh, Northwestern University**

Background: Oncofertility, integrating fertility preservation counseling (FPC) in an oncology setting, helps patients of reproductive age make informed decisions about fertility preservation when cancer treatments have the potential to adversely affect reproductive health. It is unknown if patients are satisfied with the information they receive. The purpose of this study is to explore patient's fertility preservation (FP) information needs and information-seeking behaviors to answer the research questions:

1) Is FPC is meeting oncology patients' needs? 2) What resources did oncology patients consult for additional information about FP? and 3) What additional resources would oncology patients would have liked to receive during FPC?

Methods: We conducted a mixed methods retrospective study comprised of a webbased survey (N=65), and in-depth semi-structured phone interview (n=50) with male and female oncology patients of reproductive age who received FPC at Northwestern Memorial Hospital. Measures included information satisfaction, information seeking scale, medical characteristics, and socio-demographics. We plan to conduct basic descriptives and correlation analyses using survey data and two study team members will conduct qualitative thematic analysis on interview transcripts.

Results: Preliminary findings indicate that patients are generally satisfied with FPC but still sought additional information about FP. Patients' information needs changed throughout the cancer diagnosis and treatment process. Some patients reported feeling uninformed and under-informed, particularly about risks to fertility and the cost of FP when making decisions about FP. In remission, patients who had FP desired more information regarding the processes and procedures for using their specimens, and the associated costs.

Preliminary implications of research: Findings from this study can be used to inform communication during FPC to improve patient satisfaction with, and psychosocial outcomes from oncofertility.

Request for feedback: Is retrospectively assessing information needs useful to create tools for FPC at time of diagnosis? What other factors should be considered during this formative research phase? How can we translate findings into useful tools and resources to better communicate with oncology patients about FPC? How can new FPC tools and resources be integrated into existing systems (i.e., electronic medical records)?

# Parallel Session 3

## Oral Presentations

### O.8.1
**A Brief Intervention to Enhance Breast Cancer Clinicians' Communication about Sexual Health: Feasibility, Acceptability and Preliminary Outcomes**

**Jennifer B. Reese, Fox Chase Cancer Center**
**Kristen Sorice, Fox Chase Cancer Center**
**Stephen J. Lepore, Temple University College of Public Health**
**Mary B. Daly, Fox Chase Cancer Center**
**Elizabeth A. Handorf, Fox Chase Cancer Center**
**James A. Tulsky, Dana-Farber Cancer Institute**
**Mary Catherine Beach, Johns Hopkins School of Medicine**

Background:  Lack of training may be one reason why breast cancer clinicians do not raise the topic of sexual health with their patients. We designed and evaluated the feasibility, acceptability, and potential effects on breast cancer clinicians' communication of a novel, brief intervention, iSHARE (improving patients' Sexual Health and Augmenting Relationships through Education).

Methods:  Breast cancer clinicians at a comprehensive cancer center participated in the pilot study of iSHARE, which consisted of a workbook for individual self-study (~ 15 minutes) followed by a 1-hour in-person small group workshop. Feasibility and acceptability were measured through (1) rates of enrollment, intervention participation, and survey completion, and (2) post-intervention program evaluations, respectively. Outcome data, collected at baseline and post-intervention, consisted of: (1) clinicians beliefs about sexual health communication (self-efficacy, outcome expectancies), and (2) clinicians' engagement in 2 key sexual health communication behaviors (asking questions, offering information), coded from audio recorded, transcribed clinic encounters. Effect sizes were calculated for change in communication beliefs from baseline to 6-month follow-up; change in clinicians' communication behaviors were analyzed using chi-square tests.

Findings:  Seven breast cancer clinicians [5 physicians, 2 advanced practice clinicians] enrolled (88% response rate) and were audio recorded in routine clinic encounters with 134 breast cancer outpatients (67 each pre-and post-intervention). All 7 clinicians completed the intervention and study surveys. 86% of clinicians reported that iSHARE had increased their understanding of patients' sexual concerns, helped them communicate about sexual concerns, and changed their practice. Effect sizes suggest iSHARE increased clinicians' self-efficacy (d=.27) and outcome expectancies for communicating about sexual concerns (d=.69). Analysis of dialogue suggests that clinicians' asking about sexual health increased from pre- to post-intervention (31% vs. 46%, $\chi^2$=3.14, p=0.076). Offering information to patients about sexual health did not significantly change.

Discussion:  This is the first intervention to target breast cancer clinicians' communication about sexual health. Initial findings suggest the iSHARE intervention is feasible to implement with practicing clinicians, is well-received, and can change breast cancer clinicians' beliefs about and communication behaviors with respect to sexual health.

### O.8.2
**Factors related to the expression of emotions in early stage breast cancer patients**

**Lidia Del Piccolo, Section of Clinical Psychology, University of Verona**
**Maria Angela Mazzi, Section of Clinical Psychology, University of Verona**
**Andrea Mascanzoni, Section of Clinical Psychology, University of Verona**
**Miriam Lonardi, Department of Neurological, Section of Clinical Psychology, University of Verona**
**Mariangela De Felice, Section of Clinical Psychology, University of Verona**
**Olivia Purnima Danzi, Section of Clinical Psychology, University of Verona**
**Claudia Goss, Section of Clinical Psychology, University of Verona**

Objective: 1. to evaluate how often and in which mode breast cancer patients introduce emotional issues during their first oncological visit; 2. to describe oncologists' responses to these expressions 3. to identify which factors related to the patient or to clinical interaction influence the expression of emotional issues.

Methods: 300 Italian-speaking female patients aged between 18 and 75 years, with a recent diagnosis of early-stage breast cancer were audio recorded at their first consultation with an oncologist in three different hospitals. Each consultation was analysed for the number and type of emotional expressions (VR-CoDES), questions asked and rated for patient-centredness (VRCOPE). Socio-demographic, clinical and personality variables were gathered before the consultation. Clinical variables and oncologists' evaluations were collected afterwards.

Results: preliminary results show that patients introduced emotional issues mainly as cues (86% of emotional expressions), often combined with informative needs and references to psychosocial impact of illness. Oncologists often responded by reducing space in terms of advice and reassurance (20% of all responses). The number of emotional expressions increased with patient's state anxiety and oncologists' attribution of anxiety, but depended also on centre organization and consultation style (more or less psychosocially oriented). When patients felt free to express issues of immediate importance, and physicians paid attention to what each patient wanted or needed to convey by the use of silence, minimal encouragers and affirmations, the probability to introduce personal concerns increased. Nerveless patients who gave several cues/concerns were judged by oncologists as more difficult.

Conclusions: results underlay the importance of biopsychosocial approach in cancer care, as illness and its impact on quality of life strongly affect psychological wellbeing. Physician's ability to give space and then to respond empathetically either to informative or supportive needs is relevant. Providing space is the prerequisite to let the patient disclose personal significant topics. Data showed also that oncologists' behaviour and how they structure the consultation can strongly affect patient's emotional display.


## O.8.3
**Health-literacy sensitive communication and unmet information needs in men with breast cancer**

**Sarah Halbach, University Hospital Bonn**
**Evamarie Midding, University Hospital Bonn**
**Christoph Kowalski, German Cancer Society**
**Nicole Ernstmann, University Hospital Bonn**

Only 1% of all breast cancer cases are being diagnosed in men. Male breast cancer patients (MBCP) find themselves in a complex health care environment where information is tailored to female needs and health care professionals are specialized to communicate with women. The aims of this study are 1) to investigate health-literacy sensitive communication of health care providers from the perspectives of MBCP, 2) to investigate unmet information needs of MBCP and 3) to analyse the association between health-literacy sensitive communication and unmet information needs.

As a part of the N-MALE study ('Male breast cancer: Patients' needs in prevention, diagnosis, treatment, rehabilitation, and follow-up care) data on MBCP were collected via written questionnaires in Germany between 2016 and 2017. Health-literacy sensitive communication was assessed using the validated measure HL-COM. Data on unmet information needs were collected via a modified version of the Cancer Patients' Information needs (CaPIN) measure. Descriptive statistics and regression modelling were applied for data analyses.

A total of N=100 patients took part in the study. MBCP perceived health-literacy sensitive communication of health care providers as overall high. Most reported unmet information needs include the topics medication, side effects, heredity of breast cancer, measures to promote health, supplementary naturopathy and nutrition. The results of regression modelling reveal that higher perceived health-literacy sensitive communication of health care professionals is associated with a lower amount of unmet information needs in MBCP.

Considering an own previous study conducted in a sample of colon and (female) breast cancer patients findings for HL-COM were comparable to our results in MBCP. However, men reported less unmet information needs compared to female breast cancer patients from an own previous study which may be connected to gender specific differences in informational coping styles. Further improving communication skills of health care providers as e.g. encouraging MBCP to ask questions and emphasizing the importance of understanding the illness may play an important role in meeting information needs of MBCP.


## O.8.4
**Male breast cancer – coping with a woman´s disease**

**Evamarie Midding, Center For Health Communication and Health Service Research (CHSR), University Hospital Bonn**

**Sarah Halbach, Center For Health Communication and Health Service Research (CHSR), University Hospital Bonn**
**Christoph Kowalski, German Cancer Society (DKG)**
**Rainer Weber, Department of Psychosomatic Medicine and Psychotherapy, University Hospital Köln**
**Nicole Ernstmann, Center For Health Communication and Health Service Research (CHSR), University Hospital Bonn**

Breast cancer in men is rare and only concerns around 1% of breast cancer cases in the western world. It is known as a typical woman´s disease and in routine care, male patients are usually treated the same as women. This feminization can lead to stigmatization. As former studies show, male breast cancer patients (MBCP) often feel stigmatized. So far, it is unclear how MBCP cope with this stigmatization. Therefore, we want to investigate what strategies MBCP are using to deal with suffering from a `woman´s disease´ like breast cancer and what implications it may have for communication in cancer care.

This research is part of the interdisciplinary N-MALE study (`Male breast cancer: Patients' needs in prevention, diagnosis, treatment, rehabilitation, and follow-up care´) conducted in Germany and covers the medical and psychosocial needs of MBCP in the whole process of cancer care. It embraces a diverse sample of 27 MBCP. Semi structured qualitative interviews were conducted with the patients and summary qualitative content analysis was used for analyzing the transcripts.

Findings based on the qualitative interviews show that MBCP are using various strategies to deal with disease-related stigmatization: Some men are using open and confronting strategies such as humor, normalization of stigmatizing behavior of others or enlighten others in advance to avoid negative situations. Other patients are feeling very special as being nearly the only men suffering from breast cancer. A different strategy of some patients is to keep the disease as a secret or showing avoidance, especially when it comes to showing physical blemishes.

Furthermore, results show that some men feel less stigmatized if the conversational partner shows a value-free and normal handling of the disease

Since MBCP differ in dealing with stigmatization, providers should tailor the messages to the patients to help MBCPs' dealing with their disease and reducing stigmatization. In addition, communication strategies like an open communication of the disease as well as normalization can enable patients to feel less ashamed of breast cancer. Furthermore, it is necessary to raise awareness of male breast cancer not only in cancer care but also in public.

## O.8.5
## Men's Perspectives with Healthcare Providers regarding BRCA-related Cancer Risks

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**Emily Gomez, University Of South Florida**
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Background: Men who test positive for a BRCA genetic mutation are at an increased risk for developing hereditary cancers including breast, prostate, pancreatic, and melanoma. According to the National Comprehensive Cancer Network (NCCN), men who test positive for a BRCA genetic mutation should conduct self-breast exams starting at 35-years old, undergo annual clinical breast exams beginning at 35-years old, and undergo prostate screenings starting at 45years old. While clinical screening is recommended, little is known if men attend such appointments as well as their experiences with healthcare providers regarding BRCA and hereditary cancer. Guided by Expectancy Violation Theory, the purpose of this study was to investigate men's experiences with healthcare providers regarding BRCA-related cancer risks.

Methods: A total of 25 qualitative interviews were conducted with men who are at risk for BRCA-related cancers. An iterative analysis where emergent themes are compared to existing research and theories was conducted using the constant comparison method of grounded theory (Tracy, 2013).

Findings: Analysis revealed most men do not adhere to clinical screening recommendations, and those that do believe an annual physical exam is sufficient. Moreover, some reported they would only see a healthcare provider if they experienced cancer symptoms but also stated they were under-informed about such symptoms. Additionally, participants expected their healthcare providers to be knowledgeable about hereditary cancer and to provide health risk information, yet most providers were either misinformed or under-informed regarding male BRCA-related cancer risks; this led men to believe their risks were minimal and thus stop pursuing additional information. Participants recommended healthcare providers should be better informed about male BRCA-related cancer risks,

instruct and encourage men on the recommended screenings, and provide additional resources for personal and family planning decisions. In short, interactions with healthcare providers seem to be a barrier to men's screening and healthcare services.

Discussion: These results demonstrate the need for healthcare providers to be more knowledgeable about BRCA and hereditary cancer risks as well as support their patients in making informed health decisions. Furthermore, these results may assist healthcare providers in managing male at-risk patients cope with their BRCA-related cancer risks.

## O.9.1
## Audiology students' perspectives of enacting and learning clinical communication: A qualitative interview and video reflexivity study

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**Robyn Woodward-Kron, The University Of Melbourne**
**Caitlin Barr, HEARing Cooperative Research Centre**

Background:  Effective clinical communication is a vital component in the provision of quality hearing care. While clinical communication education is beginning to find a place in the audiology curriculum, there is a scarcity of studies exploring how clinical communication is taught and learned in audiology programs. Recent studies have reported that audiology students feel ill-prepared when counselling patients about their hearing impairment. These findings illuminate the need to investigate factors that influence students' clinical communication education. The aims of the study were:

i)      to explore final year audiology students' perspectives of their own clinical communication skills during an in-house university clinical placement; and

ii)      ii) to explore students' perceptions of their clinical communication education.

Method:  Fifteen final-year graduate audiology students from an Australian University participated in the study. Students were asked to co-view their filmed clinical encounter with an adult patient, using video-reflexivity while participating in a semi-structured interview. Interviews were audio-recorded and analyzed thematically.

Findings:  Four overarching themes emerged from the thematic analysis. The first three themes of *striving to be patient-centered*, *assessment shapes behavior* and *power relations* reflected on students' perception of their own clinical encounter. The theme *what students want* described the perceived teaching methods that assisted students' clinical communication practices.

Discussion:  Study findings highlight the tension and challenges that students perceived during their clinical placement as they strived to enact a patient-centered interaction. There remain opportunities to strengthen clinical communication education such as increasing the assessment weighting towards patient-centered communication and provision of feedback of patient interaction by clinical educators. Integrating experiential learning throughout the curriculum can further reinforce students' communication learning needs.

## O.9.2
## Can single episode of well-structured communication skills training influence dentistry students' attitudes towards patients?

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**Aleksandra Bojarska, University Hospital of South Manchester**
**Elbieta Paszyska, Dept. of Integrated Dentistry,  University of Medical Sciences**

Dentistry students have only very limited opportunities to learn structured communication skills during their 5-year curriculum based training at Poznan University of Medical Science. They have  some clinical psychology training (15 hrs of lectures, 15 hours of seminars) at year 3 and Management and Communication Course at year 5 (30 hrs of seminars).

The authors offered an opportunity of elective Communication Skills for Dentists Course for 3rd year students. This 15-hour course was put together by the leading tutors, partly inspired by the educational materials of British based educational organisation PRIME (Partnership in International Medical Education).The course consists of few parts: the introduction to whole person care (WPC) and patient cantered approach (PCA). They involve group work,

discussions based on students' own clinical experiences and clinical scenarios. This is followed by the analysis of teaching videos of difficult conversations with patients.

The group of 60 students was tested (37 women and 23 men). They were all at their 3rd year of studies and did the course during 2015-17. The questionnaire immediately pre- and post-training was used. The importance of PCC (patient centred care): (answers Yes and Absolutely Yes) indicated 31% before the course vs. 82% after – increase by 158%. The importance of WPC (whole patient care) indicated (answers Important and Very Important) 34% before vs. 90% post – increase by 108%. Dealing with patients' ideas, concerns and expectations (answers Important and Very Important) 69 % before the training vs. 90% post – increase by 32%. Students were also asked to grade the most important attributes of an excellent dentist. They gave the highest rankings for 6 following characteristics: kindness 48% before vs. 58% after – increase by 21%; time given to the patient 54% before vs.68% after – increase by 28%; meeting patient's expectations 57% before vs. 72% after – increase by 26%; explanation of disease 73% before vs. 85% after – increase by 19%; WPC approach 68% before vs 82% after – increase by 20 %, generating trust 75% before vs. 83% after – increase by 14%.

The results indicate the possibility of changing students' attitudes towards patients by single educational intervention.

### O.9.3
### Collaboration and Communication: Nursing Simulation Utilizing Tele-presence Robots

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**Andreas Kummerow, Indiana State University**

**Background:** As is known, simulation allows nursing students to engage with complex patients to learn and enhance their critical thinking skills within a safe, do no harm environment. Collaborative simulations can also promote communication skills between care providers. Thus, live simulation opportunities should be provided to distance students for these very reasons.

This perceived need/opportunity gave rise to developing a multi-patient simulation for campus based traditional nursing students and distance LPN-BSN students. A fleet of tele-presence robots were utilized to bring distance students to this point of learning, the simulation lab. The objective was to provide a quality, collaborative simulation experience for all nursing students with distance students participating via tele-presence robots. As such, collaboration and communication were key to a successful learning experience.

**Methods:** In preparation for simulation, all LPN-BSN students watched a brief video about operating the tele-presence robot. This was followed by a practice session engaging and driving the robots. On simulation day, distance students logged onto their robot 30 minutes early to troubleshoot any issues and to pair with a campus buddy. Simulations lasted 50 minutes and students were required to complete a full patient assessment. Many standardized patients were used which further enhanced communication opportunities.

**Findings:** An entire class of online students accessed robots (four per simulation) and actively participated in patient simulation in collaboration with a face-to-face student. The virtual students felt an endocentric presence and indicated self-confidence and satisfaction in learning. The distance students also completed a patient profile/assessment via buddy collaboration and communication with the patient. Faculty managed the logistics of scheduling despite multiple time zones, arranged student collaboration (buddy system), and provided driving sessions in preparation for simulation.

**Discussion:** Utilization of tele-presence robots is an evolving means of distance communication with other healthcare providers and patients. In simulations, use of tele-presence robots promotes and enhances communication (with patient and campus buddy) as the user/driver has no tactile abilities. The more this technology is utilized and studied, there is opportunity to expand on its potential and use in healthcare education and communication.

### O.9.4
### Communication skills training in pharmacy students – pertinence, advantages and applicability
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**Margarida Figueiredo-Braga, Faculty of Medicine - University of Porto**

Background: **Communication competence can be improved through training in pharmacy professionals and students. Evidence has shown that practice-oriented training interventions are efficient to enhance their communicational performance making an important public-health contribution through potential improvements in health outcomes.** The objective of this study was to evaluate a brief communication skills intervention in fifth year pharmacy students. Secondary aim was to assess students' empathy and to correlate both findings with distress level and happiness. Students were also asked how they appraised the need and pertinence of communication skills training.

Methods: This cross-sectional study surveyed 78 students attending the faculty of pharmacy during 2016 and 2017. These students, while performing rotations in community and hospital pharmacies volunteered to participate in the workshops. An original questionnaire permitted to measure students' perceived necessity of communication skills training and their ability to translate into practice what they have learned. Standardized measures assessed anxiety and depression - Hospital Anxiety and Depression Scale (HADS), empathy – Interpersonal Reactivity Index (IRI), happiness - Subjective Happiness Scale (SHS), and burnout - Maslach Burnout Inventory (MBI).

Findings: For 78.4% of the students this was the first theoretical and practical communication skills training and 91.9% of students considered it very important and useful; 86.4% of the students referred to frequently deal with communicational challenges.  Although they were aware of some difficulties, students rated high (86.4%) the ability to translate to the practice what they have learned. A positive correlation was found between students' empathic concern and their academic satisfaction (p=0.043). 86.5% of students would recommend a similar course to their colleges.

Discussion: Effective communication by pharmacy students and pharmacists is essential to improve patient adherence, and guarantee therapeutic outcomes. Appropriate technical skills in delivering therapeutic and technical recommendations may be damaged by the inability to communicate to patients. Brief training interventions through  pharmacy school may be effective in enhancing students communication skills and are considered by them valuable and beneficial.

## O.10.1
### Disease & Illness: Teaching the humanistic dimensions of care through the Longitudinal Educational Experience to Advance Patient Partnerships (LEAP) Program

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Background:  The gap between basic-science and clinical training in traditional undergraduate medical education helps explain the erosion of medical student empathy in recent studies. The LEAP program is an innovative curriculum aiming to restore humanistic dimensions of medical education by contextualizing it in longitudinal patient-trainee partnership.

Methods:  Forty students enrolled in the 2012-2013 pilot program. Students are partnered with chronically ill patients and expected to make monthly contact with them by telephone, home visits, or in clinical settings. Students meet with a faculty mentor in monthly, 90-minute seminars to discuss selected psychosocial topics related to their patients. Available topics were designed to increase participant understanding of professional identity formation, increased complexities of the healthcare system, and interprofessional teamwork.

Students kept online log of patient encounters and completed a "One-Minute Paper" after monthly seminars throughout the year. Mixed-methodology year-end evaluations include: anonymous survey of self-reported understanding of various psychosocial dimensions of care, focus group to explore personal/professional growth, analysis of one-minute paper and patient logs for emerging themes as related to humanism.

Findings:  Data showed overall positive student response: 86% would recommend the program to others; 89% believe the program addressed a gap in the existing curriculum. Emerging themes from qualitative analysis captured student understanding of their multiple roles in the complex healthcare system, need to elicit and integrate patient perspectives, and importance of interprofessional collaboration.

Discussion:  Early incorporation of longitudinal clinical context to medical student education improved understanding of humanistic dimensions of care and fosters personal/professional growth.

## O.10.2
## Implementing an interprofessional workshop of basic skills for undergraduate students in Germany

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Background: While interprofessional curricula in healthcare are gaining in importance, such efforts in Germany are facing several difficulties due to institutional and organizational constraints. Therefore, interprofessional courses are often offered as elective and ungraded programs. For three years now, the Medical Faculty of Freiburg University, Germany, has been offering an elective one-day workshop regarding basic interprofessional competencies for exactly 18 undergraduate students of medicine, nursing science and physiotherapy. In November 2017, the course was offered for the first time as a compulsory subject due to organizational and didactic adjustments. The objective was the clarification of roles and responsibilities of the participating professions. This can be considered both as a basis for advanced interprofessional courses and a facilitator for team processes such as communication and decision making.

Methods: The one-day-workshop was designed for 60-70 students and took place twice. Reading material describing task areas and career paths of the three professions was sent in advance. The seminar started with a theoretical input in the plenum, then the group was split in two to enable group work, discussion and IP case work. Each profession was represented by two experienced practitioners who functioned as moderators. The seminar was evaluated using written pre- and post-seminar evaluations.

Findings: Overall, 125 students participated in the course. We found significant pre-post differences regarding knowledge and competency based items e.g. "I am able to communicate with different health professionals" or "I know the responsibilities of the participating health professionals". Effect sizes ranged between $r = .35$ - .77. Total satisfaction with the seminar can be considered as good (M=2.32 from 1=very good to 6=very bad).

Discussion: Compared with previous years, satisfaction with the seminar declined. This might be due to the fact that the seminar was compulsory this time, so that students with less interest in the subject also participated. The seminar might have lost its family familial character despite parting the total number in groups of 30-35 and group work. Nevertheless, rated competencies improved with medium to high effect sizes due to the seminar and it was possible to reach a far larger number of students.

## O.10.3
## Medical students' evolving perceptions of primary care during longitudinal outpatient experiences

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**Elizabeth R Ryan, Northwestern University Feinberg School of Medicine**
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Background: Longitudinal clinical experiences provide medical students opportunities to create continuity with patients and preceptors. Students in longitudinal clerkships can play direct patient care roles that may promote learning about patient-provider communication, professional development, and interest in primary care careers. It is unclear, however, how longitudinal clerkships impact how students perceive primary care. We sought to explore the evolving perceptions of primary care among medical students enrolled in one of two longitudinal primary care clerkships (a team-based clerkship or a one-on-one individual preceptorship) over two years.

Methods: We conducted semi-structured interviews of medical students at the beginning of medical school and at the end of the students' second year. We analyzed de-identified interview transcripts using a process of open and axial coding guided by grounded theory. Codes were compiled into a set of themes and subthemes to compare across time periods and between the two primary care tracks.

Findings: Thirty-eight medical students participated in interviews at baseline; thirty-five participated in a follow-up interview two years later. Students perceived a greatly expanded definition and scope of primary care at the two-year follow-up as compared to baseline. While students originally recognized a primary care physician as a 'passive

gatekeeper,' two years later the same students understood the complexities involved in actively managing some conditions while triaging others in an 'active gatekeeper' or 'coordinator' role. Additionally, students enrolled in the team-based clerkship identified the importance of longitudinal relationships in primary care, a theme notably absent from students in individual preceptorship settings. Team-based clerkship students directly addressed the relationships they developed with patients during their longitudinal experiences, while elucidating the importance of patient outreach.

Discussion: Longitudinal experiences for students are necessary to develop a sense of the scope of primary care, but may be insufficient to teach them key aspects of successful longitudinal patient care, including relationship building and continuity of care. Students who are given authentic roles in a supportive learning environment may be better positioned to experience the importance of patient-physician relationships and may better understand the importance of primary care to individual patients and the health system.

## O.10.4
**Teaching communication skills for undergraduates: an essential training for medical education**

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Background: Clinical communication is one of the most challenging tasks for practitioner and medical schools not always offer regular and good quality training for undergraduates. It is crucial to have formal training on communication skills and attitudes in their undergraduate learning experience. In this context, a Brazilian medical school has implemented the discipline "Clinical Communication" since 2016.

Methods: In 2017, an exploratory study of qualitative approach was done in a Midwest Brazilian Public University which receives 30 medical students per semester. Two focus groups (FG) were done before the proposed discipline and two FG just after the intervention finished, with 15 medical students/group. It was used a script, focusing on the importance of clinical communication, training methods and difficulties faced.

Findings: The intervention consisted of a six months discipline offered to a group of 30 medical students (3rd/yr). They had 4 hr/week activities that included: discussion about clinical communication for health professionals, patients and families; practices about SPIKES Protocol; Balint Groups; "ABCDE" mnemonic; Role-play strategy to know students'skills and limitations in breaking bad news. The pre-intervention FG showed 30% of students were aware of clinical communication importance and the existence of specific protocols to guide it. The post-intervention FG indicated 90% recognized the relevance and referred they were able to apply the protocols in their training situations. Most of them (90%) stated they had never been trained before and they pointed this as important gap in medical curriculum. The most appreciated teaching practices were Role Play (90%) and Balint Groups (85%). The videotaping analysis on their own performance helped 75% of the students to realize they need improvement, like body posture, verbal and non-verbal language. Eighty percent realized how important is to develop empathy to ensure good professional performance.

Discussion: These activities enabled students to make connections between their formal training (communication, relational and cognitive skills) and the real clinical practice in the community-based rotation. It allowed to reach the profile of graduates required by the new National Curriculum Guidelines for Medical

## O.10.5
**Teaching communication skills to undergraduate medicine students using constructive feedback of videotaped simulated encounters and discussing their opinion.**

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Background: Teaching communication skills should start during undergraduate medical education within clinical contexts. It should be learner-centred, interactive and experiential.

Our goal was to teach basic communication skills within clinical simulations to undergraduate medicine students using constructive feedback of videotaped simulated encounters and discussing their opinion.

Methods: This course took place with fifth-year medicine students between 2015-2017. First, a two-hour class was held to review basic communication skills by oral presentation, observing skills on videotape, and practice through role playing in groups of three (doctor, patient and observer) with feedback from four facilitators. In groups of four, the students prepared a 5-minute videotape simulated encounter, rated their videotape with the GATHA-res scale, and prepared a document with the problems identified, outcomes desired, and skills needed for improvement. All these materials were analyzed by facilitators and brought to the seminars. Six two-hour seminars were held every year, with a participation of 139, 123, and 130 students, respectively, each year with six facilitators.

The seminar was led by an agenda-led-outcome-based analysis approach, identifying the individual's agenda, providing constructive feedback and

re-rehearsal with the role playing of at least one skill by each student.

One of the facilitators observed and assessed (using global rating) the improvement of skills previously identified by students by means of feedback and re-rehearsal.

Findings: In 2015, 78% of students showed improvement, 82% in 2016, and 95% in 2017, confirming the effectiveness of the teaching intervention.

Their opinion about teaching goals, content, methods, facilitators, organization and results were obtained using a survey (Lykert scale of five points). The global arithmetical mean was 4.5 for 2015, 4.7 for 2016, and 4.8 for 2017. The items related with the feedback from the videotaped simulated encounter ("useful for learning" 85%, "enjoyable" 75%, "adequate for continued use" 90%, and "satisfaction with facilitators" 95%) were the best evaluated with the highest scores for all three years.

Discussion: The contribution of this teaching experience is its feasibility in institutions with limited time for teaching communication skills effectively. Most of the students that participated showed improvement of skills and perceived the activity positively.

## O.11.1
## Additional effects of therapist communication on the effect of physical therapy treatment in older adults; a meta-analysis

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Background: Physical activity is a key factor in staying healthy by preventing cardiovascular and metabolic diseases, obesity, falls, cognitive impairment, osteoporosis, muscular weakness, and dementia. Physical therapy provides services aimed at developing, maintaining, and restoring a maximum level of physical activity. Besides exercises, a physical therapist might stimulate older adults' physical activity level by deploying diverse communication techniques. It is unknown which communication technique has an additional effect on physical therapy treatment. As a result, older adults do not always receive the most effective treatment. This study investigates the additional value of therapist communication during physical therapy treatment on older adult's physical activity level.

Methods: A meta-analysis. Clinical trials that compared the effect of therapists' communication and exercise compared to only exercise were included and identified in PubMed, CINAHL, Embase, PsychINFO, PEDro, Cochrane. Communication was classified with the taxonomy of Behavior Change Techniques (BCT). Data were analyzed separately for self-reported and performance-based physical activity level and, additionally, in groups of BCT. Effect sizes were pooled using Cochrane's Review Manager. GRADE's criteria were followed to analyse the overall quality and strength of the evidence.

Findings: Twelve studies did fulfill the criteria. There is a moderate level of evidence that adding BCT improved older adults' self-reported physical activities measured immediately after therapy and a high level of evidence at intermediate follow-up (to 12 months). The BCT 'Generalization of physical activity behavior' was the only communication technique that independently improved physical activity. The BCT 'Social support' as well as 'Goals and planning' added no effect above exercise.

Discussion: There is high to moderate evidence of self-reported physical activity improvement when adding communication during physical therapy treatment for older adults, especially for generalization of physical activity (giving confidence and reinforcing transition of exercise to daily living). More research needs to be performed on the effectiveness of BCTs not included in this study. Although the effects are very small to small, it is recommended that physical therapists add behavior change techniques to interventions with older adults, especially those that help them generalize the exercises in physical therapy to the physical activity in their daily life.

## O.11.2
## An analysis of directly observed weight-related communication during routine primary care consultations

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Background: Primary healthcare is strategically placed to manage patient overweight and obesity effectively. Despite this, self-report evidence suggests patient weight is infrequently discussed during routine primary care consultations and the primary care weight-related communication process is poorly understood. This research investigated the communication process of weight discussion between primary care practitioners and overweight patients, during routine primary care consultations in Scotland. Specifically, this research assessed the prevalence of weight discussion during routine primary care consultations and examined how weight communication processes were constructed in terms of communication content and context.

Methods: In a mixed methods cross-sectional research design, video capture was utilized to directly observe weight communication during recorded routine primary care consultations. Communication during consultations with overweight and obese patients was coded using the Roter Interaction Analysis System (RIAS), and the novel St Andrews Issue Response Analysis System (SAIRAS). Communication was analysed using frequency analysis and multilevel regression modelling. Fourteen primary care practitioners (12 general practitioners, 2 practice nurses) and 305 patients (218 overweight/obese) from 7 primary care practices in Scotland participated.

Findings: Weight discussion was observed in 25% of routine consultations with overweight patients. Practitioners increased partnership building and activating communication during weight discussion compared with all other consultation discussion (p <0.05). Additionally, patients decreased emotional expression and responsiveness communication (p <0.01) and increased information provision (p <0.001) during weight discussion. Weight discussion was predicted by practitioners' use of partnership building and activating communication (OR 1.04, p <0.01). Weight-related consultation outcomes were more likely when weight was contextualised as 'problematic' (p <0.001) and were predicted by a greater number of distinct weight discussions within a consultation (OR 4.27, p <0.05).

Discussion: Findings from this data suggest that weight is not routinely discussed with overweight patients during primary care consultations in Scotland. To better facilitate weight discussion practitioners should contextualise patient weight as a problem, increase their use of partnership building and activating communication, and mention patient weight multiple times in a consultation. This research provides evidence for the development of a primary care practitioner communication training intervention to more effectively discuss weight with overweight and obese patients.

## O.11.3
## General Practice Professional needs and expectations regarding a patient smoking cessation support

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Background: While general practice professionals can play a key role in smoking cessation counseling, the referral of smoking patients to various evidence-based interventions (EBIs) remains suboptimal. Involving smokers in the decision for a smoking cessation method will likely increase involvement and cessation motivation in patients. However, general practice professional (GPP) experiences with such referral and decision making about cessation methods remains unclear. Therefore, the aim of this study is to explore the facilitating and hindering factors for the adequate referral to EBIs in general practice professionals.

Methods: We invited 20 general practice professionals varying in level of expertise and work experience to participate in semi-structured individual interviews. Interview content is based on the I-Change model and the Diffusion of Innovations theory. Data is systematically analyzed using the framework method.

(Preliminary) Findings: Preliminary findings suggest most smoking counseling trajectories start with an inventory of the patients' level of motivation and expressed preferences. Referral to EBIs occurs rarely as professionals usually conduct face-to-face counseling. Reasons stated for this are limited availability of other options in the region, trust in the established bond between de smoker and the health professionals and lack of perceived evidence for alternative EBIs such as eHealth and group counseling.

Discussion: Results show us that while face-to-face counseling is referred to most, there is relatively little referring to other forms of EBIs because of barriers and unmet needs like a complete and detailed overview of all available options. The developing of a platform these options can be found can aid GPPs to refer to EBIs more which can result in saving time and money for the GPP.

## O.11.4
**Teachable opportunities to promote lifestyle behaviours in routine postnatal consultations**

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**Hannah Talbot, University Of Manchester**
**Emily Strong, University Of Manchester**
**Danielle Brooker, University Of Manchester**
**Chelsea Kettle, University Of Manchester**
**Noa Tauber, University Of Manchester**
**Debbie Smith, Leeds Trinity University**

Background: Pregnancy is a life event when women are particularly motivated to change health behaviours and can be viewed as a 'teachable moment'. Research suggests motivations created during pregnancy are most likely to be implemented postnatally, making this an important time to intervene. In the UK all women are invited to a routine GP consultation 6-8 weeks postnatally. The aim of this study was to examine the extent to which this teaching opportunity is utilised, and GP and women's views of the potential barriers (and solutions) to initiating and supporting behaviour change talk at this time.

Methods: A qualitative study investigated the experiences and views of a purposive sample of 18 GPs and 15 women within 12 months of giving birth. Transcribed audio-recorded interviews were analysed thematically.

Findings: Both sets of participants reported limitations in the extent to which behaviour change talk occurred during consultations. Whilst GPs recognised the teachable opportunities inherent at this time in women's lives, they were reluctant to initiate these conversations for fear of damaging patient relationships. In contrast women were uncertain of the purpose of the consultation and expected GPs to initiate conversations that were relevant to their health and that of their family.

Discussion: Despite women's motivation to engage in behaviour change conversations postnatally, GPs fail to capitalize on these teachable opportunities. Interventions should focus on guiding health care professionals how to have initiate and develop these conversations.

## O.11.5
**The role of Patient Health Engagement Model in predicting patient activation, adherence to treatment and patients' quality of life: a structural equation model**

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Background: Increasing bodies of scientific research today examines the factors and interventions affecting patients' ability to self-manage and adhere to treatment. Patient activation is considered the most reliable indicator of patients' self-management. Only a few studies have tried to assess the role of psychosocial factors in promoting patient activation. A more systematic modeling of the psychosocial factors explaining the variance of patient activation is needed.

This stydy aimed to test the hypothesized effect of patient activation on medication adherence and patient's quality of life; to test the hypothesized effects of he quality of the patient/doctor relationship on patient activation; and to test the hypothesized mediating effect of Patient Health Engagement Model (PHE-model) in this pathway.

Methods: This cross-sectional study involved 1630 Italian-speaking adult chronic patients. The survey included measures of i) patient activation (Patient Activation Measure 13 –short form); ii) Patient Engagement (Patient Health Engagement Scale); iii) patient adherence (4 item-Morinsky Medication Adherence Scale); iv) the patients quality of life (Sf-12); v) the quality of the patient/doctor relationship (Health Care Climate Questionnaire). Structural equation modeling was used to test the hypotheses proposed.

Findings: According to the theoretical model we hypothesized, research results confirmed that patients' activation significantly affects their reported medication adherence and quality of life. Moreover, the quality of the patient-doctor relationship were demonstrated to affect the level of patient activation. Finally, the mediation effect of the Patient Health Engagement model was confirmed by the analysis.

Discussion: Consistently with the results of previous studies, these findings demonstrate that Patient Health Engagement is a critical factor in enhancing the quality of care. Fostering the quality of the patient-doctors relationship is demostrated to be the essential condition to promote patient engagement. Finally, the Patient Health Engagement Model might acts as a mechanism to increase patient activation and adherence.

## O.12.1
## Clinical encounters may perpetuate patients` lack of understanding of their chronic low back pain

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**Ann Moore, University of Brighton. School of Health Sciences**
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Background: Research in the area of non-specific chronic low back pain (NSCLBP) has emphasised that the patients` cognitions regarding pain as well as their cultural backgrounds have a significant influence on their response to treatment. The knowledge in this area has been mainly influenced by a few countries such as the UK and Australia. To the authors` knowledge, no studies have been published regarding this topic in Portugal. This study aimed to explore how NSCLBP Portuguese patients understand and make sense of their disorder.

Methods: After obtaining ethical approval, an interpretative phenomelogical analysis was employed to explore the experiences of eight participants, who were recruited purposefully, from three Portuguese health sites. Semi-structured one-to-one interviews were carried out, audio-recorded and transcribed verbatim.

Findings: In the context of a long lasting and disruptive experience, understanding and finding meaning for NSCLBP seemed to attain major relevance for this study`s participants. Clinical encounters between the participants and health professionals had an important role in the aforementioned search for meaning. The findings indicated that the content and delivery of health professionals` explanations for NSCLBP did not seem to meet the participants` expectations. Indeed, their expectations of receiving a meaningful explanation for NSCLBP were successively unmet, as they were confronted with what they perceive as incomprehensible explanations from health professionals. Rather than being helpful, as expected by the participants, the clinical encounters appeared to perpetuate their lack of understanding about their disorder and perceived inability to control it.

Discussion: Considering the methodological approach, this study`s findings should be considered in terms of theoretical transferability rather than empirical generalizability. The NSCLBP Portuguese patients` accounts indicate that health professionals need to explore patients` understanding of their disorder and involve them in the development of an explanation that assimilates the individuals` experiences and personal meanings. This requires a shift in the health professionals` traditional clinician-centred assessment and approach to these patients, with an increasing focus on the individual patient`s account. It may create opportunities to develop individually tailored

approaches and move the focus from what appears relevant to the health professional to what is currently important to the patient.


## O.12.2
## First Impressions of Physicians Based on Gender, Physical Attractiveness, and Smiling

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**Dr Swatantra**
**Mollie Ruben**
**Vanessa Castro**

Background: First impressions based on seeing a physician may be made during a first encounter, or on a hospital or practice website. Social psychological research has documented many lasting effects of first impressions. In the healthcare context, first impressions may trigger stereotypes that have impact on patient behavior and choices.

Methods: Photographs of 32 "physicians" (a mix of actual and posing physicians all of whom wore a white coat and stethoscope) were presented to 99 analogue patients in the USA in an online study (mean age = 35; 41% female). Physicians were between 27 and 66 years of age (mean age = 45), half men and half women (age matched). Each physician was shown to analogue patients either smiling or not. Analogue patients rated the physicians on warmth (3 items) and competence (3 items), and own desire to be treated again by the physician. Independent observers rated the physicians' physical attractiveness. Analysis was done with multilevel modeling.

Findings: All reported effects were statistically significant (p < .05). Physicians who were more attractive or were smiling received higher ratings on both warmth and competence. Women physicians were rated as warmer but less competent than men physicians. Interaction effects showed that smiling made women seem warmer than men, but there was no warmth gender difference in the absence of smiling. Attractiveness did not affect men's competence, but more attractive women physicians were rated as notably less competent than the men (whether the men were attractive or not). When physicians smiled, glasses did not matter for competence, but when they did not smile, those with glasses were rated higher in competence than those without glasses. Finally, patients wanted less to be treated again by women who did not smile than by men who did not smile.

Discussion: Both gender and attractiveness are influential factors in first impressions of physicians. Several findings point to negative impacts for women physicians, particularly the overall rating of less competence, the finding that more attractive women were denigrated in perceived competence, and the finding that nonsmiling women were less desired for continuing care than nonsmiling men.


## O.12.3
## Healthcare professionals' attitudes to audio-recording outpatient consultations: A qualitative study revealing a continuum of enthusiasm and skepticism

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Introduction: Providing audio-recordings of health consultations to patients has been a recurring intervention within communication research for at least three decades. This research has provided evidence of multiple benefits for patients and shown that audio-recordings are highly valued by patients and relatives.

Nevertheless, dissemination into clinical practice as a routine proposition has not yet happened. Previously, the lack of feasible technology has been a considerable obstacle for implementation. However, this is no longer the case as technology today supports patient-initiated audio-recordings using smartphones. What persists as a barrier are the concerns of the healthcare professionals (HCP). Thus, this study aims at exploring the attitudes and beliefs towards audio-recording consultations in a group of HCP acquainted with the approach.

Methods: Focus group interviews with 29 HCPs (13 nurses, 16 clinicians) from four different outpatient clinics at

Lillebaelt Hospital. Everyone participated in an RCT providing a recording of their consultations to patients (n=3,572) over a whole year. Interviews were conducted within each department and grouped by profession. The analysis was conducted as a qualitative thematic analysis using Nvivo11.

Results: The following six themes were identified:

1. Benefits of audio-recording for patients and HCPs,

2. Influence on the consultation and patient-HCP-relationship,

3. Decisional power of initiating recordings,

4. Considerations on the use of resources,

5. Concerns about patients (mis)use, 6.Uncertainty about legal implications.

Each theme represents a large range of opinions expressed by the HCPs rather than general consensus on the theme at stake.

Implications: Uncertainty and concerns are major barriers for routinely providing audio-recordings to patients as this constitutes a skepticism that for some HCPs exceeds the experienced benefits. Thus, the results imply that clarification of health legislation and general legal rights are needed to ensure a safe working environment for the HCPs when providing audio-recordings to patients.

## O.12.4
## Mixed method study on computer use and physician patient communications: patient perspective

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Mixed method study on computer use and physician patient communications: patient perspective

Background: Systematic reviews have shown that there is limited literature on the impact of electronic medical record (EMR) on physician-patient communication addressing the patient perspective as compared to the physician perspective. This study aims to understand patients' perspective on the effect of EMR on physician-patient communication in an ambulatory setting.

Methods: This is a mixed method study using semi-structured interviews among 49 patients and a paper based survey of a validated communication assessment tool (CAT) among 382 patients. The tool consists of fifteen questions using a 5-likert scale (poor, fair, good, very good, and excellent). The tool questions are considered as one unit and the score is reported as a mean communication score.

Findings: Nearly two-thirds of the surveyed patients (62%) and almost all interviewed patients did not consider that using the computer by their physician during the visit would negatively affect the patient-doctor communication. Patients rated their physician with a higher communication score when there was an ongoing relationship between the physician and the patient. Higher communication scores were reported for extensive use of the computer by the physician to check results (p<0.001), to retrieve patient record information (p<0.001) and to educate patients (p<0.001) as compared to less use. Five themes emerged from the analysis of the interviews: (1) EMR use in clinic is considered a necessity; (2) EMR use by physicians is efficient in record keeping and information retrieval; (3) physicians balance between using the computer and paying attention to patients; (4) computer use by physicians might affect communication about personal and intimate issues; (5) concomitant computer use while listening to the patient was not considered annoying.

Discussion: Most patients appreciate EMR use by physicians during the clinical encounter and acknowledge its benefits despite the presence of some concerns. Attention rather than eye contact and ongoing relationship with the physicians are what matters for patients. Some EMR features could enhance the physician patient communication.

## O.12.5
## What obstacles impede patient access to specialized palliative care services in a health communication perspective? A systematic review

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Background: Worldwide the aging population is growing, bringing along an increase in the incidence of life-threatening conditions. Palliative care aims to help reducing suffering among people experiencing a life-threatening disease and their families. Despite the potential value, palliative care levels of utilization are suboptimal. This review aims to identify how information and communication about palliative care impact its utilization. Specifically, the focus is on perceptions, views, attitudes, communication patterns and styles regarding palliative care among the public, patients and their families, and health care professionals.

Methods: Four academic databases (PubMed, PsychINFO, CINHAL, and Communication and mass media complete) were systematically searched for literature reporting about qualitative and quantitative studies describing barriers and facilitators to palliative care conducted among health care professionals, adult patients, or a general adult population.

Findings: Thematic analysis allowed us to identify three main themes. First, awareness: the public has a low level of awareness of what palliative care is and what it can offer to patients and their families. Second, attitudes: palliative care is inappropriately associated only to the care for people in the last days of life and is applied mainly in oncology settings. It is, thus, framed in negative terms and originate negative attitudes that translate in a reluctance to request or accept its services. Last, education and communication: health professionals often lack education on - and consequently knowledge of – specialized palliative care services, making them inappropriately see the promotion of palliative care as a limitation of treatments approaches that they are not keen to accept. In addition, many feel uncomfortable discussing issues related to end-of-life with patients and their relatives. Palliative care is therefore often not addressed unless the patients themselves initiate the discussion.

Discussion: Based upon this review, health care strategies aiming at fostering the implementation of specialized palliative care services should consider specific factors. In particular, low public awareness and false beliefs in addition to poor health professional education on palliative care and communication skills are major barriers to accessing and referring to specialized palliative care services.

## O.13.1
## Attending to Values in Healthcare: A Framework and Strategies for Implementation

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Background/Context: Attention to core values and skilled communication strengthens relationships and remains necessary for safe, compassionate care environments. Initiated in 2011, the *International Charter for Human Values in Healthcare,* the result of an interprofessional, global effort to identify core values, provides a framework of values fundamental to healthcare interactions.

Methods: An international, interprofessional collaborative of clinicians, educators, researchers, communication specialists and linguists collected and analyzed data from multiple groups and used combined qualitative research methods to identify five categories of core values —

Compassion, Respect, Commitment to Integrity and Ethical Practice, Commitment to Excellence, and Justice in Healthcare — vital to healthcare interactions. The resulting *International Charter for Human Values in Healthcare* provides a framework for practice, education and research.

Findings: The Charter's framework has been used to explore, identify and incorporate values into the curricula of a number of interprofessional courses, faculty development sessions, and clinical training programs. We have created curricular models and are exploring and refining strategies for explicitly teaching values. Strategies used include: appreciative inquiry, use of narrative, reflective exercises, small group work, displayed thinking, trigger tapes, and realistic enactments using improvisational actors.

The process of individuals and groups explicitly exploring and sharing their values, and learning ways to make them visible through skilled communication, facilitates evolving awareness of and attention to values, as well as an appreciation of the dynamic application of these values in all relationships and interactions. We continue to work collaboratively and internationally to translate values into action in healthcare settings, and to carry out research projects to assess the effectiveness of various approaches.

Discussion: The International Charter for Human Values in Healthcare provides a strategy and framework to teach and promote the primacy of values necessary for practicing compassionate, ethical, and safe healthcare. Relationships and skilled communication allow us to demonstrate values. Values articulated in the Charter inform ongoing and evolving projects and programs in clinical care, training, research, and organizational change efforts.

## O.13.2
## "Same same or different?" A review of reviews of person-centered and patient-centered care

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Background: Patient-centered care has been on the healthcare agenda for several decades, as opposed to the previously prevailing bio-medically oriented and paternalistic view of healthcare. In recent years, the concept of person-centered care has been launched, as a development of patient-centered care. The objective of the present study was to provide a synthesis of already synthesized literature on person-centered care and patient-centered care in order to identify similarities and differences between the two concepts. We believe this objective can be powerfully addressed in a synthesis of articles that have already covered large parts of the field of person- and patient-centered care.

Methods: An overview of reviews was conducted to locate synthesized literature published between January 2000 and March 2017. Nine authors screened, extracted data, and quality appraised the sources. A total of 21 articles deemed relevant to this overview were synthesized using a thematic analysis. The analysis was based on thematic analysis according to Braun and Clarke, but consideration was given to the unusually high abstraction level of the included data. Through an iterative process, the authors determined whether a theme or sub-theme was present or not in an article.

Findings: The analysis resulted in nine themes present in person-centered as well as in patient-centered care: (1) empathy, (2), respect (3), engagement, (4), relationship, (5) communication, (6) shared decision-making, (7) holistic focus, (8), individualized focus, and (9) coordinated care. This means a considerable overlap between the two concepts. However, the analysis also revealed that the goal of person-centered care is a meaningful life while the goal of patient-centered care is a functional life.

Discussion: The study revealed that there are similarities between person-centered and patient-centered care, but the goals differ. Clarification of the contents of person-centered care and patient-centered care may assist practitioners and researchers to develop and measure the relevant aspects of care. This study may produce a guideline for health providers and educators, giving them the tool needed to select the more relevant of the two centeredness-concepts.

## O.13.3
## Examining medical students' attitudes toward patient-centered care

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Background: Providing patient-centered care (PCC), which emphasizes individualized and respectful care, is a central goal of medical education. To promote PCC practice students, as future healthcare providers, should establish positive attitudes toward PCC. The objectives of the present study:

1. To examine the associations between communication self-efficacy, communication attitudes, empathy attitudes, and PCC attitudes.

2. To provide a new theoretical model that tests whether communication attitudes and empathy attitudes mediate the association between communication self-efficacy and PCC attitudes.

3. To examine differences between students in pre-clinical versus clinical stages and genders regarding study variables.

Methods: A quantitative cross-sectional study was conducted among 653 medical students (Mage=27.49, SD=3.60) using convenience sampling, through self-report questionnaires. The data were analyzed using SPSS (version 25) through Pearson's correlations for examining direct (bivariate) effects, PROCESS macro for examining mediation effects, and independent-samples t-tests for examining medical-school stage and gender differences.

Findings: Communication self-efficacy, communication attitudes, and empathy attitudes were positively associated with PCC attitudes. The model showed that communication attitudes and empathy attitudes completely mediate the association between communication self-efficacy and PCC attitudes. Students in clinical years had more positive attitudes toward PCC and empathy, and higher self-efficacy regarding communication than students in pre-clinical years. Female students had more positive attitudes toward PCC, communication, and empathy than male students.

Discussion: The study adds to the literature regarding the understanding of factors contributing to positive attitudes toward PCC. In light of the findings, we suggest developing various initiatives within the medical-school curricula, focused on improving students' perceptions of communication self-efficacy and on establishing positive attitudes toward communication and empathy. Initiatives should be tailored to medical-school-stage and gender differences. Promoting PCC through these perceptions and attitudes will be beneficial to students, as well as to their future patients.

## O.13.4
## Patients' experience with opioid tapering: A conceptual model

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Background: Objectives are to characterize patients' experience with opioid tapering, to propose an empirically-based conceptual model of patients' experience with opioid tapering, and to identify suggestions for promoting productive, patient-centered communication about opioid tapering.

Methods: We conducted 4 focus groups involving 21 adults with chronic back or neck pain who were in different stages of opioid tapering, followed by 1-on-1 interviews with 7 patients (selected from the original 21) identified as the most compelling storytellers. Transcripts were qualitatively analyzed to characterize patients' tapering experiences, build a conceptual model based on themes that emerged from the data, and identify strategies for discussing opioid tapering.

Findings: The conceptual model resulting from data analysis comprises several components. Patients' prior experience with tapering, goals and values, and fears of pain and withdrawal each influence communication with clinicians about opioid tapering. Tapering requires patients to do many different kinds of work (e.g., performing activities, managing pain, managing side effects and withdrawal symptoms, managing opioids, managing emotions, managing self-identity); most of this work impacts patients' everyday lives but is not discussed with clinicians. Communication with clinicians influences strategies for managing tapering. These strategies can be patient-initiated (keeping an opioid "stash" for pain flares, soliciting social support during withdrawals), clinician-initiated (unilateral opioid dose reduction), or coconstructed by patient and clinician (choosing among different non-opioid medication options). Patients' experience with tapering strategies impacts tapering outcomes (i.e., willingness to taper and opioid dose consumed). Patients' pain and perceived need for opioids fluctuates from day to day in response to fluctuations in pain, changes in patients' everyday life, and changes in their medical condition. Thus, patients and clinicians continually adjust their strategies while tapering.

Discussion: Most patients experience opioid tapering as a challenging process that requires many different kinds of patient work. Clinician strategies for fostering patient-centered discussions of tapering include understanding how **patients' everyday life impacts pain and opioid consumption, counseling patients about the kinds of work required** during tapering, helping patients prioritize and implement tapering strategies, and developing contingency plans for managing fluctuations in pain. Our model can be applied and refined in future research.

**O.13.5**
**Validating Coding Methods for Patient-Centered, Mental Health, and Motivational Interviews**

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**Robert Smith, Michigan State University**

Background: We previously demonstrated in RCTs that a Patient-Centered Interviewing (PCI) Model, a Motivational Interviewing (MI) Model, and a Mental Health Care Model (MHCM) were evidence-based. For a recent study, we developed dichotomous coding methods to evaluate each model, seeking greater reliability than is possible with Likert ratings. We also wanted methods undergraduate students could code, were inexpensive, and captured the personal and emotional dimensions of each model. The coding methods and their reliabilities have been presented here and published in PEC. We report validation of the coding methods by demonstrating responsiveness to training.

Methods: Setting: Community-based medical residencies.

Participants: 39 intervention medical residents and 32 control residents.

Intervention: We trained two medical faculty intensively (10% FTE) for 15 months. They then trained intervention residents experientially for 75 hours in each of three years in the PCI, MI, and MHCM models.

Design: Quasi-experimental

Main Outcomes and Measures: **Trained undergraduate students, independent of the research, coded residents'** conduct of each model when interacting with trained simulated patients. Previously reported, the coding methods are highly reliable; e.g., overall kappas were, respectively, 0.90, 0.84, and 0.87. For comparing the pre-test and post-test scores of the intervention and control groups, we used Analysis of Variance.

Results: For the PCI Model, there was a significant interaction between site and time (F=44.95, p<.001); mean pre-test and post-test control group scores 3.32 and 2.32, respectively, compared to 4.13 and 10.34 for the intervention group.

For the MI Model, there was a significant interaction between site and time (F=24.97, p<.001); mean pre-test and post-test control group scores were 9.14 and 7.38, respectively, compared to 8.75 and 12.63 for the intervention group.

For the MHCM, there was a significant interaction between study site and time (F=33.51, p<.001); mean pre-test and post-test control group scores were 8.15 and 8.79, respectively, compared to 7.44 and 15.0 for the intervention group.

Conclusions: By demonstrating learning from intensive training, the dichotomous coding methods show predictive validity, making each coding method valid and reliable. This further recommends each as a criterion standard for evaluating patient-centered interviewing, motivational interviewing, and mental health care interactions.

**O.14.1**
**Navigating research after orthopaedic trauma: a qualitative study of patient and staff experiences.**

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Background: This qualitative research was conducted as part of a feasibility study for a randomised controlled trial that will compare two surgical interventions used to fix fractures of the distal femur. Patients eligible to participate in this study are typically frail and are often confused or in pain after their injury. Using a phenomenological

approach, our aim was to understand staffs' experiences of conducting and communicating research with frail patients after orthopaedic trauma and patients' experiences of being approached to participate in research.

Methods: We conducted semi-structured interviews with 11 patients participating in the study or their relative, 10 surgeons and 14 research associates involved in study. Interviews were conducted face to face or by telephone. Where participants agreed, interviews were audio recorded and transcribed. Transcripts were analysed inductively using thematic analysis. Data saturation occurred when the team agreed no new elements were arising from the interviews or within the themes.

Findings: One of the main themes to emerge from the data was 'navigating research after orthopaedic trauma'. Staff 'navigated' patients and their family through the process of making sense of the study and enabled them to participate. Patients' ability to make sense of the study was hindered by the impact of their injury. Staff understood the degree to which they could cope with information and understood what patients wanted to know. Staff enabled participation by i) seeking cues about patient's capacity to consent to the study and the degree to which they could be involved and ii) incorporating family in consent negotiations and using personal or nominated consultees where appropriate.

Discussion: In this study, experienced research associates enabled the majority of patients who were approached to participate in the study. They understood the needs of this group of patients who were often frail or confused and sought strategies to overcome the barriers of involving them in research. Our findings further understanding of how best to involve this group of patients in research and may be applicable to research with older patients in other specialities.

## O.14.2
## Clinical practice guidelines: do they foster choice awareness?

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Background: Clinician's awareness that decisions are preference-sensitive is key to shared decision making. Clinical practice guidelines (CPGs) drive clinicians' selection of treatment options. Conditional (versus strong) recommendations in CPGs provide indications for preference-sensitivity. We explored to what extent preference-sensitivity is acknowledged in the way recommendations in CPGs are phrased and underpinned.

Methods: We analysed six modules of three Dutch oncology CPGs (breast, colorectal, and non-small-cell lung cancer). Two researchers coded for each module and the given treatment recommendations if:

- recommendations were conditional,

- strength of recommendations was consistent with the remaining CPG text

- benefit-harm trade-offs were stated transparently,

- benefits, harms and probabilities were provided,

- patient preferences were incorporated,

- guideline panel member preferences were stated.

Next, in semi-structured interviews with CPG panel members, we checked the results and inventoried explanations for our findings.

Findings: We identified 32 recommendations of which 18 (56%) were phrased as conditional. For seven (22%) recommendations we found inconsistencies in strength of recommendations. For 20 recommendations, the modules contained explicit advice to include patients and their preferences in decision-making.

Five of the six modules presented trade-off statements, however in which harms were described generically as "morbidity and mortality", "comorbidity", or "toxicity". Five modules focused strongly on benefits and neglected harms and quality of life. Probabilities were seldom presented in effective formats.

None of the modules presented data on patient preferences. CPG panel members' preferences were not made explicit but appeared to impact 50% of the recommendations.

Interviewees overall confirmed these findings. Explanations given for inconsistencies, underexposed harms, and lack of patient preference data involved cultural-historical preferences, lack of clear instructions, assumed function of CPGs, competition between specialists, and the opinion that patient preferences data irrelevant for CPGs development.

Discussion: We may conclude that the incomplete presentation of harms, preferences of CPG panels' members and their assumptions about patient preferences hinder the neutral presentation of options in CPGs and the thereby the impetus to involve patient preferences in decisions.

### O.14.3
### Conversational Inquiry—A Problem-Oriented Shared Decision Making

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Background:  Shared Decision Makings' (SDM) purpose, like all medical decision-making, is to help advance patients' problematic situations. When this purpose is overlooked, SDM risks becoming communicative behaviors and steps, divorced from why patient and clinician are talking: because something is wrong. Alternatively, we risk loosing sight of the human situation, and thinking that SDM's purpose is limited to selecting between alternatives.

While evaluating alternatives and sound communication are important in decision-making, patients' problematic situations remain. They demand that we act well. SDM is potentially a means of forming coherent, caring action that is responsive to the intellectual uncertainty, emotional turmoil, and practical restrictions of these situations. Focused on this purpose, we developed a theoretically informed, and practically implemented approach to SDM.

Methods:  We married our fourteen-year experience observing and intervening in clinical encounters, with theories of action and pluralism. Richard McKeon's philosophy of pluralism helped distinguish conceptions of SDM, several of which are active in the field, along with an under-developed action-oriented SDM. John Dewey's theory of action in problematic situations contributed to developing SDM's function in forming coherent caring action. We used theory to inform practice, and practice to inform and test theory in the human-centered design of a decision conversation aid for patients with atrial fibrillation.

Findings:  The dialog of theory, and the design practice of iterative encounter intervention produced a decision conversation aid warranting evaluation in an ongoing 1,000 patient RCT, and a problem-oriented SDM theory: Conversational Inquiry. This theory treats conversation as an experimental medium for resolving a troubling situation. Patient-Clinician decision conversation functions as an inquiry, necessitated by a fraught situation, in which patient and clinician establish a workable problem formulation, develop hypotheses for resolution (options), try (test) them out in conversation, to produce caring action that makes practical, intellectual, and emotional sense for each person and their situation.

Discussion:  Conversational Inquiry accompanies SDM theories and practices of inter-personal communication and, evaluating alternatives. Its contribution is its focus on forming coherent action in response to human problems. We are exploring Conversational Inquiry further as we develop conversation aids for kidney, emergency, intensive, and pain care.

### O.14.4
### Essential professional competencies to facilitate shared decision-making in dementia care networks

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Background:  Decision-making in care networks of people with dementia is complicated by the progressive nature of the dementia and the complex and dynamic social context. Shared decision-making in this context has specific

characteristics and requires certain steps from professionals. There is little evidence about the knowledge, behaviour and attitudes that professionals need to support shared decision-making. This study aims at determining the professional competencies needed for facilitating shared decision-making in care networks of people with dementia.

Methods: We held semi-structured interviews with 15 care networks of people with dementia (involving the person with dementia, two informal caregivers, two professional caregivers). We analysed our data using framework analysis. The framework that we used was based on a longitudinal multi-perspective study focussing on decision-making in care networks of people with dementia. Preliminary results were member-checked in three focus group interviews with informal caregivers, persons with dementia, and case managers dementia.

Findings: Our analysis showed seven professional competencies necessary for facilitating shared decision-making in dementia care networks: (1) aligning to the unique characteristics of the care network, (2) supporting autonomy of people with dementia and their informal carers, (3) sharing responsibilities (4) facilitating communication and information exchange, (5) working towards shared perspectives of the situation, and (6) timing decisions rightly.

Discussion: Facilitating shared decision-making in dementia care networks requires professionals to adopt a network approach in order to reach decisions that are meaningful and timely for people with dementia and their informal caregivers. Besides this, professionals need to be aware of the changes over time and the need to anticipate and time decisions according to the preferences of the care network members.


## O.14.5
## Just Sign Here? A National Survey of Opioid Treatment Agreements for Chronic Pain Management

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**Lori Henault, Boston University Medical Center**
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Background: Guidelines recommend using opioid treatment agreements (OTAs) when prescribing opioids for patients with chronic pain. Despite the lack of evidence supporting their use, OTAs can be used to educate patients about opioid risks and benefits and to establish shared expectations for treatment goals and monitoring. We surveyed clinicians who use OTAs and described characteristics and implementation of their OTAs.

Methods: We sent electronic surveys with requests for copies of OTAs to 62,530 clinicians who had registered for Boston University's Safe and Competent Opioid Prescribing Education program between 3/2013-6/2017. The survey queried for practice locations and specialties; presence of State OTA requirements; design and implementation of OTAs; and opinions on OTAs' value and effectiveness in reducing opioid misuse. Data were analyzed on the sample of clinicians who reported using OTAs. We also performed a thematic analysis of the OTAs to identify overarching themes.

Results: In this study, 443 respondents from 44 US states reported using an OTA. The most common practice specialties were primary care and pain medicine. Most practices created an original OTA (40%) or modified an existing OTA (31%), with 73% reporting that their practices required OTAs for patients prescribed opioids for chronic pain and 23% reporting that their state required OTA use. More clinicians reported that OTAs were "often" or "always" worth the effort than those who reported that OTAs were "often" or "always" effective in reducing opioid misuse (66% versus 28%, respectively). Respondents submitted 122 OTAs that varied widely in length, format, and tone. Most OTAs featured punitive themes such as patient obligations, clinic rules, mandatory monitoring, and potential punishments. Eighty-five percent of agreements warned patients that violation would result in opioid discontinuation and/or discharge from the practice. Few agreements addressed provider responsibilities and patient rights.

Conclusions: Most OTAs are designed to enact rules and penalties. These documents rarely focus on helping patients make informed decisions or facilitating patient-provider communication. Clinicians and researchers should revisit the function of OTAs and consider developing patient-centered agreements consistent with caring rather than contractual relationships. Research is needed to determine OTAs efficacy in preventing misuse and promoting improvements in care.

# Symposia

## S.3
## Innovative approaches to measuring and monitoring medication use in clinical and research settings

**Stacy Bailey, University Of North Carolina At Chapel Hill**
**Delesha Carpenter, University Of North Carolina At Chapel Hill**
**Laura Sahm, University College Cork**
**Michael Wolf, Northwestern University**

Rationale:

Prescription (Rx) medication use is a cornerstone of disease self-management. Taking Rx medications safely is essential to achieve therapeutic benefit and reduce risks. Yet patients are often poorly informed about their Rx medication's risks, benefits and instructions for use and few mechanisms exist in clinical practice to monitor patients' medication use in outpatient settings. Our session will provide an overview of current technology-based initiatives to improve the measurement and surveillance of medication use for both clinical and research settings.

Chair: The Chair will provide an overview of current research on the comparative effectiveness of commonly used, technology-based strategies (e.g. text messaging, patient portal questionnaires) for measuring and promoting medication adherence among medically complex patients. Challenges and potential solutions related to the use of these technologies will be identified and discussed. Other novel and currently available consumer technologies will be introduced and methods for integrating the use of these tools into primary care practices explored.

Presenter 1: Presenter 1 will present results from an innovative study that is evaluating the use of wearable sensors to detect the presence of medications in human sweat. She will discuss the potential of wearable sensors to enable patients to passively monitor medication adherence and how the presence of drugs in sweat correlates with other bodily fluids, including saliva, blood and interstitial fluid. Considerations for effectively visualizing medication adherence and its relationship to physiologic parameters will also be discussed.

Presenter 2: Presenter 2 will discuss recent and ongoing research initiatives that utilize the electronic health record, patient portal and interactive voice recognition technology to promote medication safety among patients taking higher-risk drugs. The feasibility and reliability of these systems will be discussed, as well as their adaptation to specific patient populations. Details will be provided on how such systems can identify adherence or safety concerns and provide structured, actionable feedback to clinical practices for their review.

Presenter 3: Presenter 3 will provide an overview of common practices for patient-provider risk communication and surveillance of prescription medication use in Ireland. She will provide examples of possible pharmacy-based interventions that could be implemented to help monitor and address patient medication safety and adherence challenges. Discussions will explore the adaptability of Irish and US based technological solutions to other countries, health systems and patient populations.

Qualification of submitters:

Chair: The chair is an associate professor in a US-based university. She is currently the multiple Principal Investigator of two NIH R01s that use technology to promote medication safety and adherence among primary care patients.

Presenter 1: Presenter 1 is an assistant professor in a School of Pharmacy in a US-based university. She has extensive expertise in using mobile applications and other technologies to improve patients' medication use. Her research has been conducted among both urban and rural populations in the US.

Presenter 2: Presenter 2 is a Professor in a School of Medicine in a US-based university. He has led numerous federal, industry and foundation-funded studies evaluating low-literacy interventions to promote patient understanding and use of prescribed medications.

Presenter 3: Presenter 3 is a senior lecturer and director of a MPharm undergraduate program in Ireland. She has extensive experience researching pharmacy-focused strategies to improve medication adherence in ambulatory care settings in Ireland and across Europe.

## S.4
## National Quality & Safety Standards; an untapped lever to improve healthcare communication

**Peter Martin, Deakin University**
**Suellen Allen, Australian Commission on Safety and Quality in Healthcare**
**Shakaib Rehman, University of Arizona College of Medicine**
**Guendalina Graffigna, Università Cattolica del Sacro Cuore of Milano**

Rationale:

There is limited evidence about healthcare communication that has been systematically translated into large healthcare organisations. There is an increasing focus on quality and safety (Q&S), person-centred care, patient-rated outcomes & experiences. Clinical communication is increasingly recognised a key mechanism to improve Q&S.

Implementing Q&S systems is predicated on clinicians having the requisite communication skills. New Q&S standards may provide an opportunity to embed communication skill training in order to reduce the variability of **clinicians' acquisition of these core skills.**

Presenters Contributions:

Peter Martin: Peter has been a clinician for over 30 years, a communication teacher for 20+ years. His interests include embedding communication skills training within health organisations. He has recently become the chair of pEACH. He is the director of a University Centre tasked with working with organisations to do a whole of organisation approach regarding the communication skills that enable person-centred healthcare.

Suellen Allen: Suellen is the national director leading the standard of clinical communication in Australia. She brings a wealth of experience both as a previous clinician and as a policy maker interested in improving healthcare communication. She will share her experience of developing this new standard that all Australian private and public hospitals will have to meet by 2019.This may be of interest to many national groups who wish to collaborate with their equivalent accreditation organisation.

Professor Shakaib Rehman: Shak is the Chair of Advocacy & Public Policy Committee of the Arizona Chapter of American College of Physicians. He has been teaching and researching healthcare communication for over 20 years and has had senior roles with the ACM. He has participated in numerous training programs regarding patient advocacy. He has served on the national Public Policy committee for 6+ years and was involved in the implementation of Affordable Care Act.

Guendalina Graffigna: Brings 15 years of experience of the consumer experience and engagement in the health system particularly in chronic care. This has led her to engage in shaping health policies and practices for this critical cohort of patients.

This pEACH led symposium aims to get our sector to consider the opportunities that a Q&S policy framework offer us to improve healthcare communication. The majority of the session will be interactive and depends on using the expertise within the room after having the scene set by the panellists above.

Introduction 40 minutes(10 minutes for each panel member)

The panel perspectives with be from how health organisations ,clinicians, leaders, consumers and policy makers view the critical interplay between Q&S and healthcare communication.

Delegate tasks 20 minutes

Those attending will be asked to contribute in how we can use Q&S frameworks:

- What can EACH do?
    - EACH leadership
    - pEACH priority projects or policy development
- How can we support national initiatives?
- What existing or future data may help demonstrate the relationship between healthcare communication interventions and the Q&S improvement cycle?

Panel and Delegate Q&A 20 minutes

Wrap up and next steps 5-10 minutes

# Workshops

**W.5**
**Empathic consultation: How can real patients contribute to empathy training in medical education?**

**Matthijs Bosveld, Person Behind the Patient foundation**
**Sjim Romme, Person Behind the Patient foundation**

Rationale: Whereas healthcare professionals aim to communicate in a patient-centred way patients often do not perceive it as such. To enhance medical students' ability to communicate effectively and in an emphatic way during consultations, Dutch medical schools offer students communication skills training. Most of these training programmes include practicing with simulated patients. Whereas this has proven to be an effective method for teaching communication skills, the impact of illness on other domains of an individual and their loved ones is difficult to simulate and sometimes leads to resistance in students because it feels unrealistic.

Learning objectives: After this session, participants will be able to…

- …appreciate the main challenges of working with real patients in empathy training;

- …identify the didactical advantages and disadvantages of using real patients;

- …list the practical barriers associated with using real patients;

- …demonstrate skills to use real patients.

Teaching methods: This workshop will use a variety of methods including:

- A short introductory presentation with an example to set a reference;

- Small group sessions in which participants will brainstorm and discuss options and create an exemplary educational module in which their students and patients will interact, considering both practical and didactical arguments.

- Every group will present and discuss their exemplary educational module to the whole group to learn from each other;

- The session will be closed by formulating take home messages (individually first and combined in a plenary).

Evaluation of outcomes: Participants will be asked to write-down their most important individual learning point. This will be shared in a plenary and will serve as evaluation of outcomes together with the take home messages.

| Timeline | Activity |
|---|---|
| 0-10 minutes | Introduction and presentation of the evidence base regarding the use of real patients in medical education |
| 10-40 minutes | Brainstorm in small groups and creating 'the best educational module' using real patients |
| 40-60 minutes | Pitch of each group's educational modules and brief discussion |
| 60-80 minutes | Presentation of host's initiative on using real patients in empathy training and relating it to the participants' models |
| 80-90 minutes | Formulating take home messages |

**W.6**
**Teaching Embodied Awareness in Medical Education: Strategies for Physician Nonverbal Communication**

**Nicole Defenbaugh, Lehigh Valley Health Network**
**Aleksandra Bacewicz, University of South Florida - Morsani College of Medicine**

Rationale:  Medical education teaches students how to effectively communicate with patients, often with an emphasis on the spoken word. For patients, however, nonverbal cues remain the primary means for making inferences regarding physician competency, error disclosure, immediacy (e.g., touch), expressiveness (e.g., facial expressions) and altercentrism (e.g., attentiveness) (Hannawa, 2014). For the patient, the physician's body is an important site of observation. For the physician, however, s/he may be less aware of his/her own body in relation to others. What is missing is an acknowledgement of what the physician's body is nonverbally communicating. A medical elective, "Performing Health(Care): Physician Nonverbal Communication" was created. This workshop invites participants to engage in a newly developed curriculum by learning how to listen to their bodies, engage others, and create a safe learning environment. Participants will engage in learning activities and reflect on how they can bring the contents of the curriculum back to their institution.

Learning Objectives:

1) Describe ways to bring awareness to the physician's body,

2) Learn how to create a safe learning environment for embodiment and

3) Engage in techniques to use personally and teach others in clinical practice.


Teaching Method:

| Format | Activities | Time Frame |
|---|---|---|
| Current State | Breathing activity | 5 minutes |
| | PowerPoint slides | 5 minutes |
| Elective Curriculum | PowerPoint slides | 5 minutes |
| | Discussion of safe learning | 5 minutes |
| Part I – Reflecting on Self | "How I Feel" activity | 10 minutes |
| | Debrief and discussion | 5 minutes |
| Part II – Awareness of Others | "How Close?" activity | minutes |
| | Debrief and discussion | 5 minutes |
| Part III – Skills for Connecting | "Laying on of Hands" activity | 10 minutes |
| | Debrief & discussion | 5 minutes |
| Evaluation | Participant reflection on activities | 5 minutes |
| | "Next Steps" planning worksheet | 5 minutes |
| Closing | Review of workshop | 5 minutes |
| | Open discussion & questions | 10 minutes |

Evaluation:

1) Participants will reflect on the activities and their visceral impact by writing a personal reflection.

2) **Participants will be given a "Next Steps" planning worksheet to brainstorm how the course and techniques** can be applied personally and academically.

Reference: Hannawa (2014). Disclosing medical errors to patients: Effects of nonverbal involvement. Patient Education and Counseling, 94(3,) 310-313.


**W.7**
**Teaching health care providers how to work effectively with health care interpreters.**

**Onelis Quirindongo-Cedeno, Mayo Clinic**
**Jeff Rabatin, Mayo Clinic**
**Mary Jo Kasten, Mayo Clinic**

Rationale:  Over 20% of US population speak a language other than English at home. Limited English proficiency (LEP) is an important factor impacting health disparities and has been linked to overall poor health status.  As the demographic characteristics of our patient polupation  continue to change, health care providers face the challenge of ensuring that LEP patients receive high quality care. Optimial utilization of health care interpreters is crucial in achiving equal care. This workshop is designed to review basic skills in working with health care interpreters and review a diverse menu of tools for educators  to teach health care providers best practices to work effectively with health care interpreters.

Learning Objectives:

- Review the literature and evidence behind the value of working with trained medical interpreters.

- Review best practices for communicating through a health care interpreter.

- Discuss and experience different teaching modalities design to help learners improve their communication skills when working with health care interpreters.

Teaching methods:  Teaching methodology includes mini-didactic sessions, facilitated large group discussions, facilitated video debrief, demonstration via role play, small group skills practice, and reflection via personalized action plan.

Timeline:

- Welcome, ground rules, introduction, objectives (10min)

- Didactic- Evidence behind the value of working with trained medical interpreters.

- (5 min)

- Review of best practices of working with health care interpreters (10 min)

- Demonstration with video debrief (10 min)

- Break (5 min)

- Demonstration of different teaching modalities: /role play/ audience participation/case development/ Interpreter Q/A session (20 min)

- Small group activity/skills practice. Session will be conducted in English.  Participants we will be divided by language spoken and a prepared clinical case will be provided. Participants will conduct and interview and observer will provide feedback. (25 min)

- Action Plan evaluation (5 min)

Evaluation:  Participants will be invited to complete a personalize action plan of next steps that they will consider for development or modification of teaching methodologies related to curriculum on working with healthcare interpretation at their respective institutions.

# Fringe

## F.1.1
## Hit the bulls eye: effective Goalsetting

**Dörte Watzek, Berne University of Applied Sciences**
**Sibylle Matt Robert, Berne University of Applied Sciences**

Background: **One of three main components of therapeutic alliance is patients' and therapists' agreement on goals** (Bording, 1979). Patients want to choose goals themselves and they wish to be supported by their therapists. Physiotherapists often use inadequate strategies for goalsetting with patients (Barnard et al, 2010).

Therapist should have substantial knowledge how to set motivational goals. (a) Goals should be phrased as approaching goals. If you told someone to be aware not to hit the goalpost, he or she will concentrate on the goalpost and might hit it with better chance than without that hint. (b) According to attributional theory everybody is searching for reasons of success or failure. Attribution has a big impact on our motivation or demotivation. It can either sustain the self-esteem or invalidate it (Heider, 1958). Reaching a goal with a middle difficulty has the chance to attribute the success to one self, this is motivating to make an effort the next time and it is fostering the self.

Methods:

1. Introduction to the rules of the game and the roles (3 min.).

2. Game: Participants work in pairs, a thrower and a coach. We will use different kind of balls and distances. The longer the distance, the more points the pair gets. The aim of the game is similar to basketball. The coach has the task to give motivational feedback (4 min.).

3. Analysis: Out of the experiences of the participants we focus on different aspects of feedback in consideration of attributional theory. We have a look at the wording and level of difficulty of the goal (8 min.).

We use this approach regularly with students in physiotherapy in the first year of training.

Evaluation: Students always enjoy the session about goalsetting. They confirmed in oral evaluation that it is a useful reflexion about the challenging attributional theory.


## F.1.2
## Opening Pandora's Box of emotions in communication training to facilitate patient-centeredness

**Anne Marie Skaarup, Copenhagen Academy for Medical Education and Simulation, Capital Region of Copenhagen**
**Kirsten Greineder Engel, Copenhagen Academy for Medical Education and Simulation, Capital Region of Copenhagen**

Background: Emotions are natural reactions to external circumstances which occur in every interaction. Emotions influence the way we think even when we try to control them. Reacting empathically to a patient is critically important for the delivery of patient-centered care but it is not always easy. Awareness of emotional reactions and **patterns in different situations makes it easier to understand the reasons behind patients' responses and, in turn, to** provide support and facilitate changes in the responses. This is crucial for establishing authentic patient-centered relationships, as well as for caring for oneself.

Participants in this session will be actively engaged in creative ways to work with emotions enabling reflection, training and learning about patient-centeredness in a safe environment. The methods, which are currently used at a communication course for medical students, can easily be applied with other target groups. The aim of this session is to inspire participants to test different methods that address awareness of emotions in their own context.

Methods:

- Introduction (2 min)

- Method 1 Picture cards (15 min) o Participants choose a picture card which reminds them of a special personal patient conversation

- o  Participants show and share in pairs what the picture card is about

- o  Facilitator asks a few participants to share in plenum how the cards had impacted their story in relation to elucidate the patient perspective, emotions or challenges

- o  Final perspectives

- Method 2 Video-appetizer (13 min)

- Showing a video-appetizer of a doctor-patient encounter followed by reflection:

  - o  How did the doctor meet the patient? o What might the doctor have done differently? o What was the patient's opinion about the encounter?

  - o  Final perspectives

Evaluation:  The methods have been pilot-tested with positive feedback from both teachers and students and are now integrated in a mandatory communication course for medical students. Teachers value the flexible format which gives them the opportunity to focus on student needs, and they report that visual methods are vital to help students view situations from patients' perspective.

Our experiences indicate that, in difficult situations, it is easier to express emotions in words when using pictures/videos.


## F.1.3
## Remarkable Lines: Exploring Significant Illness through narrative, drama, poetry and music

**Sarah Collins, University of Manchester**
**Gary Thompstone, University of Manchester**
**Jemma Drake, University of Manchester**
**Ian Townsend, University of Manchester**
**Emma Romy-Jones, University of Manchester**

Background:  In our communication teaching and learning, we employ creative approaches in exploring narratives and the lived experience of individuals' and families' encounters with significant illness, death and dying. Through interwoven dialogues that juxtapose discourses of realities and fictions, we investigate the ways in which acts of imagination and lived experience work off one another, and how this interplay can help us – whether as health professionals, medical students, patients, carers or family members – identify with what it means and what it feels like to have a significant or life-threatening illness.

Methods:  We will open this fringe event with a collage performance of lines of monologue and dialogue interspersed with music. This performance will draw on real, first-hand personal experience, creative interpretations and fictions, in narratives of significant illness, death and dying, as provided by medical students, patients and carers.

This performance will be paused at three intervals for the audience to participate in three x 3-minute creative tasks: writing poems, sculpture, drama.

Then, we will incorporate participants' creative work into a set of reflective, critical interrogations of the lines and words we have performed. We will use this to illustrate the ways in which experimenting with narrative structures (in poetry, prose, dialogue and monologue), word choices, and different media (music, written words, spoken words, gesture and movement) can:

a)  shape and extend our interpretations of, and responses to, significant illness, death and dying;

b)  provide a rich, ethnographic and literary resource for training health professionals and supporting carers;

c)  motivate and inspire patient-centred approaches in clinical practice.

Evaluation:  We will provide a pictorial display of healthcare professional students' experiences of learning using these creative techniques, including some of the students' work. This will show the learning outcomes and impact of this approach for teaching and learning about significant illness, death and dying.

# Innovative Technology Oral Presentations

## IT.1.1
**An application to facilitate mobile clinical workplace-based assessment of communication skills**

**Silas Taylor, UNSW Sydney**

Background: Communicating effectively with clients is a critical professional skill for the modern healthcare provider. Yet, clinical learning environments are highly dynamic and present learning on an opportunistic, not structured, basis. Learning opportunities are often under-utilised by students due to the lack of a means to document, record and respond to them. CWAapp is an innovative solution to these challenges by increasing the capacity of clinical assessors to perform workplace-based assessments, since the technological solution is more readily available, reliable and secure than current paper forms. This digital solution encourages students to perform assessments and maximises educational value by completing the reflective cycle, providing them instantaneous feedback, and requiring them to add reflection to assessments. Instigation of remedial processes, for lower performing students, is also made feasible.

Methods: The student-patient observed communication assessment (SOCA) is a previously developed assessment tool, derived from the Calgary-Cambridge Guide. Students are required to complete several SOCAs to complete the overall assessment. Students download the CWAapp to their device, present the app, with the SOCA form, to the assessor to securely conduct assessments, before students complete assessments by entering their reflection, also in the app.

Results: For students, the CWAapp makes SOCA accessible at the point of need, showing a record of assessments completed or awaiting completion. In early 2018, a pilot group of 13 students all successfully completed at least one SOCA on the app, including reflection. The app will soon be launched to the main student cohort of 560 students.

For tutors, the CWAapp provides a means to conduct an assessment, enter grades and written feedback, and initiate the completion of the assessment, whereby the student will be prompted to add their reflection. Pilot data shows that eight different assessors were able to successfully conduct assessments.

For Faculty staff, the CWAapp integrates with Faculty record keeping systems and provides a record of individual student SOCA completions, and a database of all student SOCA completions, creating important data for analytics on student completions which can be used for accreditation and strategic requirements, as well as research purposes.

## IT.1.2
**Digital + Personal = Improving Health and Care by Listening to Patients**

**Gregory Makoul, PatientWisdom**
**Jennifer Moore, PatientWisdom**
**Mike Anderes, Froedtert & the Medical College of Wisconsin**
**Bradley Crotty, Froedtert & the Medical College of Wisconsin**

Background. We worked as colleagues at an academic medical center and a start-up company to implement and scale a digital platform that makes it easy for providers to understand what matters to their patients. Educational objectives for digital demonstration: (1) Articulate how a digital solution can enhance patient-provider communication in everyday practice; (2) Adopt/adapt a disciplined approach to implementing and scaling new technologies; (3) Understand how health organizations can use aggregated views of real-world, real-time patient perspectives to drive learning and improvement.

Methods. PatientWisdom is a secure digital platform that focuses on what matters to patients as people. Before clinical encounters, patients (or caregivers) are invited to sign up and share stories about themselves, their health, and their care. PatientWisdom runs analytics on the information collected, distilling it into meaningful, actionable insights to help providers and organizations be more responsive. For instance, a 1-screen inSIGHT summary is integrated into the electronic health record so every member of the care team can see an at-a-glance view of the whole patient (e.g., goals, barriers, joys, pressures, how health affects life). Leaders access aggregate reports with visualizations summarizing rigorous content analysis of themes, subthemes, and sentiment. We assessed experience via brief surveys.

Results. Providers report that it takes less than 20 seconds to view the inSIGHT summary and 82% confirm that it helps them know what matters to their patients; 90% of patients report that PatientWisdom improves communication with providers who use it and 95% rate their visit as going 'extremely well' if the inSIGHT summary was used (vs 82% if not, p < .05). At the organizational level, results have also highlighted opportunities to help patients who are ready to talk about advance directives (30%). This work has been recognized at the national level in the US: Froedtert & the Medical College of Wisconsin earned the 2017 Vizient Clinical Innovation Award for its work with PatientWisdom.

Implications. Digital solutions that collect, curate, and share patient perspectives – individually and at scale – are one example of an effective engagement strategy that can turn health transactions into healing relationships for both patients and providers.

## IT.1.3
## Experiences with the Online Practising of Communication Techniques Using TrainTool

**Remco Haringhuizen, Radboudumc**
**Ellemieke Rasenberg, Radboudumc**
**Ietske Siemann, Radboudumc**

Background: Practice and feedback are required to master communication skills. Especially during the first part of the Medical Sciences study, Radboudumc in Nijmegen, the Netherlands, pays special attention to the acquisition of specific communication skills. In workshops students practise with peers and/or an actor. As time is limited in these workshops we searched for innovative ways so that groups of students can practise independently.

Methods: Using the online program *TrainTool* students practise a specific communication technique before the workshop. Students are invited to respond to short clips that present a particular situation. The student's response is recorded and can be shared with peers or a teacher, who are asked for feedback. During the workshop there is more practising, supervised by a teacher and/or an actor.

We developed a *TrainTool* program to improve the skill "communicating with the Imessage". All students and teachers were asked to fill in a questionnaire, which consisted of multiple choice and open questions. Analysis took place through descriptive statistics. 77% (n=259) of all students and 100% (n=10) of all teachers filled in the questionnaire.

Findings: The average student rating for the *TrainTool* program was 7.0 (scale 1–10). 69% of the students thought the program was informative, and 50% would like to use it more often. Of all student responses 24% mentioned they got useful feedback from peers, and 46% from teachers. Some students indicated that seeing themselves was "awkward" or felt the training situation was not sufficiently realistic. All teachers were positive about the *TrainTool* program and noticed that students came more prepared to workshops.

Possible implications for communication in healthcare

The positive rating among students and teachers shows that it can be useful to practise with *TrainTool* more often in communication workshops at Radboudumc. A new *TrainTool* program for the communication technique "listening, recapitulating, and questioning" has already been developed and will be evaluated. We are working on ways to make more effective use of the feedback possibilities of the program.

## IT.1.4
## Exploring learners' needs for a digital training tool on information giving skills for oncological professionals

**Ellen Smets, Academic Medical Center/University of Amsterdam**
**Sebastiaan Stuij, Academic Medical Center/University of Amsterdam**
**Nanon Labrie, Academic Medical Center/University of Amsterdam**
**Sandra van Dulmen, NIVEL: Netherlands Institute for Health Services Research**
**Marie-Jose Kersten, Academic Medical Center/University of Amsterdam**
**Robert Hulsman, Academic Medical Center/University of Amsterdam**
**Noor Christoph, Academic Medical Center/University of Amsterdam**

**Stans Drossaert, Psychology, Health and Technology. University of Twente**
**Arwen Pieterse, Department of Medical Decision Making, Leiden University Medical Center**
**Julia van Weert, Amsterdam School of Communication Research/ASCoR, University of Amsterdam**
**Hanneke de Haes, Academic Medical Center/University of Amsterdam**

Background: Communication skills training for oncological professionals often relies on a 'classical' approach in which participants attend face-to-face tutoring sessions. Although effective, this approach is time-consuming, difficult to schedule, and costly. Innovative digital training tools may overcome these barriers by enabling time and location independent ways of learning, thereby making it more easy to participate in communication skills training. Still, engaging learners in online teaching is challenging. We explored oncological healthcare providers' engagement towards the content and format of a digital training tool aimed at communicating treatment information more effectively.

Methods: We followed the steps as indicated in the CeHRes Roadmap, a user-centered and holistic framework for developing eHealth applications and interventions. [1] First, we uncovered oncological professionals' learning needs and preferences regarding the digital training tool using four focus group sessions (n= 13) and three individual interviews. [2] Additionally, we performed a systematic literature review focusing on available digital communication skills training programs for healthcare providers. [3] Subsequently, two prototypes of a digital training tool were developed:

1) an e-learning module and

2) 2) a 'chatbot' which acts as a 'digital coach' on a smartphone.

In addition we developed an instructional animation on information giving skills. Both prototypes were tested and further developed in an iterative process of five individual test sessions with five professionals (residents).

Findings: [1] Results indicated a need among professionals to become more proficient in a) tailoring information to cancer patients' individual needs and b) providing information in a structured way. Professionals would like a digital tool to support the provision of feedback on uploaded video-recordings of either simulated or actual consultations. Concerns mainly involved issues of privacy. [2] The literature review identified 13 digital training programs. Of these programs, nine were effective in terms of communication performance, confidence and/or knowledge levels. [3] Both prototypes were evaluated as attractive and as potentially of value as an additional teaching tool, i.e., as part of blended learning. Mockups of the prototypes and animation will be presented. Implications: based on the results, a final digital training tool will be developed and evaluated among oncological professionals.

## IT.1.5
## Positive Peers: Implementation of a Mobile Application for Supporting Young People Living with HIV

**Mary Step, Kent State University College Of Public Health**
**Julia Briggs, Blue Star Design**
**Jennifer McMillen-Smith, Metrohealth Medical Center**
**Ann Avery, Metrohealth Medical Center**

Background: There are challenges inherent to linking young people living with HIV to care. This population often reflects low health literacy and transient living. *Positive Peers* is a mobile application that provides HIV information, closed community chat, and personal reminders to HIV positive young adults in care at a county hospital. One year after launching *Positive Peers* it is possible to report preliminary patterns of engagement with the application.

Methods: Young adults between the age of 14-34 and seeking HIV care at a public hospital (n = 113) were invited to download the *Positive Peers* mobile application and participate in a prospective study evaluating its use. This app is linked to a network of social media platforms that serve to: 1) recruit local out of care youth, 2) build the *Positive Peers* brand, and 3) disseminate important heath information to the community. As part of our implementation strategy, we tracked both social media and application engagement. Social media and application metrics are provided to illustrate the success of our strategies.

Findings: Social media engagement for healthcare sites in the US averages between .05-2.0%. Across 18 months, average *Positive Peers* engagement far exceeded averages (Facebook 2.95%; Instagram 7.3%, and Twitter 2.95%). *Positive Peers* users logged in between 3-20 times per month. Median function use was 5 hits per month for the personal health tracker, 8 for community forum, 3 for the resources page, and 1 for the reminders function. A challenge to user engagement in this population is application deletion due to memory limitations. Novelty

associated with application updates supported continued application relevance. Monthly trend data will be reported.

Discussion: Across platforms, social media engagement with *Positive Peers* is excellent due to careful attention to our collective voice and continuous input of our stakeholders. Our vibrant social media presence extends our reach to both users and non-users.  User application engagement is good, with most activity occurring in the community forum and personal health tracker. Mobile applications can be a powerful tool for reaching and sustaining engagement with vulnerable health populations. Developers must continuously integrate stakeholder perceptions to maintain user engagement.


## IT.1.6
## The 'Active Ageing' app: supporting diabetes patients' self-care abilities and motivation

**Sarah Bigi, Department of Linguistic Sciences and Foreign Literatures, Università Cattolica del Sacro Cuore**
**Maria Grazia Rossi, ArgLab-Institute of Philosophy of Language, FCSH Nova University of Lisbon**
**Amelia Caretto, Department of Internal Medicine, San Raffaele Scientific Institute and Università Vita-Salute**
**Andrea Laurenzi, Department of Internal Medicine, San Raffaele Scientific Institute and Università Vita-Salute**
**Stefano Triberti, Department of Psychology, Università Cattolica del Sacro Cuore**
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Background: Few mobile applications for diabetes care support incorporate educational functions for adherence to therapy, self-management and healthy lifestyle and even fewer are tested for usability. We tested the mobile application "Active Ageing" in a pilot study among seniors (age >63 years) with type 2 diabetes (T2D) and women with gestational diabetes (GDM).

Methods: An application, structured according to a cognitive-argumentative model of verbal communication with empowering text messages was developed at Università Cattolica in Milan. Patients were recruited at the San Raffaele Hospital in Milan between 01/01/2017 and 31/08/2017, and invited to use the application to store and share data about glucose (SMBG) and weight measurements, and completed the System Usability Scale (SUS). Patients could also add notes about lifestyle.

Results: 19 out of 116 T2D patients (median age 69 (65-73) years) and 12 out of 12 GDM patients (median age 37 (34-40) years) accepted to participate. After a median of 11 weeks of use (7-15), 7 T2D and 10 GDM patients completed the SUS (median score 77.5 (75-97.5) and 92.5 (87.5-95) respectively, p=0.22). T2D patients reported in the App 72% of SMBG and 60% of weight measurements required, GDM patients 53.5% of SMBG and 29% of weight measurements required. As for the use of the notes function, T2D patients were more likely to add notes than GDM ones. The analysis of the recorded notes shows that notes may be used not only to explain abnormal data, but also to express emotions and confide personal information

Implications for communication in healthcare: The study shows that the app is perceived as usable and helpful to manage daily self-care tasks. The analysis of the notes shows that eHealth devices like this app can represent opportunities not only for self-management, but also to empower and enrich trust between patients and health providers.


## IT.1.7
## Knowledge professionals need, when they need it: Presenting an online learning platform about rare disorders - Sjelden.no

**Kari Hagen, Frambu Resource Center For Rare Disorders**
**Lene S Gloslie, Norwegian National Advisory Unit on Rare Disorders**
**Elisabeth Føll Bækken, Norwegian National Advisory Unit on Rare Disorders**

**Rasmus S Dinessen, Norwegian National Advisory Unit on Rare Disorders**
**Bjørn-Magne Stuestøl, Norwegian National Advisory Unit on Rare Disorders**

Background:  The Norwegian Advisory Unit on Rare Disorders (NKSD) established an open online academy in 2017 - *Sjelden.no*.

Research and experience shows that when professionals lack knowledge, it makes living with a rare disorder more challenging. Therefore, the objective of *Sjelden.no* is to efficiently increase knowledge about rare disorders amongst professionals by providing easy access, high-quality, and relevant information.

*Sjelden.no'*s target group is professionals working with people with rare disorders and their families. This includes professionals working in all sectors (e.g., government/private, health, school, kindergarden)

Methods:  *Sjelden.no* offers a variety of different digital learning resources such as e-learning courses, videos, podcasts, and online lectures. In collaboration with a Norwegian University, *Sjelden.no* is developing a 10 ECTS course on rare diseases. The first students will enroll in the autumn of 2019. The resources are developed and quality assured by the leading experts on rare disorders in Norway.

Due to most professionals' busy schedules, *Sjelden.no* is striving to maximize the learning outcome in a time efficient manner. *Sjelden.no* does this by incorporating learning methods that have been documented to give the best learning outcome.

Findings:  So far in the project, feedback from users has mainly been positive. Direct quotes from users will be presented, including health professionals and parents. Examples include: "I now have a much deeper understanding and feel more prepared for difficult situations that can arise" - Health professional. Example 2: "As parents of a child with Neurofibromatosis, we are grateful that you have made an elearning course about the diagnosis targeting school professionals. Our dialogue with the school is now much better and more productive.  The school professionals have an increased and up-to-date knowledge about the diagnosis and various challenges our child faces" - Father

Discussion:  We will share our experiences developing *Sjelden.no* hoping it will be an inspiration for other specialist centers for rare disorders. Overcoming challenges, including identifying the target group and how to reach them, will be presented. Overall strengths and limitations spreading knowledge about rare disorders will be discussed.

# Poster Session 2

**200**
**Patient Preferences About Serious Illness Instrument:Innovation in Eliciting Preferences**

**Kimberly Carter, Carilion Clinic**
**Phyllis Whitehead, Carilion Clinic**

Participants will be able to:

1.      Discuss the need to improve EOL communication with patients and their families.

2.      Identify strategies to enhance EOL communication between clinicians and patients.

3.      Describe the Patient Preferences About Serious Illness (PASI) instrument.

Studies show when End-of-Life (EOL) decisions were ascertained, direct input from patients occurred in fewer than 5% of circumstances, with the majority of time, patients' preferences being unavailable for the decision making process either out of fear or false belief that there is time to do it later. Interventions directed at improving EOL communication can improve patient outcomes, such as better symptom management and avoidance of undesired interventions; however, the means of implementing these discussions are challenging. Healthcare providers (HCPs) report numerous barriers to EOL conversations with patients, yet there is a lack of evidence on appropriate and effective ways HCPs can initiate EOL dialogues with seriously ill patients. Strategies are needed to elicit seriously ill patients' care preferences. Ongoing discussions between patients and HCPs throughout the course of a serious disease can increase patients' self-efficacy in planning EOL decisions. Instruments that provide structured approaches to guide these challenging EOL conversations are needed. The Patient Preferences About Serious Illness Instrument (PASI) is a resource to normalize the conversation for practitioners and should be used in conjunction with existing advance care planning directives such as Physician Orders for Life-Sustaining Treatments (POLST), The Five Wishes, and the Serious Illness Conversation Guide. This presentation will review the psychometric work to date with PASI and explore the feasibility of using this toolto facilitate these challenging EOL dialogues.

**201**
**Challenges of self-directed learning among pediatric residents and faculties in ACGMEI pediatric residency Program-Qatar**

**Ahmed Essam Shalaby Elghawaby, Hamad Medical Corporation**
**Khaled Siddiq, Hamad Medical Corporation**
**Muna Maarafiya, Hamad Medical Corporation**
**Hatim Abdelrahman, Hamad Medical Corporation**
**Manasik hassan, Hamad Medical Corporation**
**Ahmed Alhammadi, Hamad Medical Corporation**

Background:  Self-assessment, self-directed learning (SDL) is one of the cornerstone for new aura of teaching. Consider as one way to support transition from undergraduate to postgraduate learning. Self -directed learning is supporting the concept of lifelong learning and is considered one of the main new methods in medical education and teaching. Despite the importance of self-assessment to lifelong learning, studies had  shown that physicians have limited ability to self-assess ,therefore skills need to be developed to insure implanting and success of SDL among resident and faculty .

our aim was to explore the concept of self-assessment, Self-directed Learning among pediatric residents and faculty ,to explore the readiness of residents and faulty to implement SDL in pediatric training program  And to identify skills and methods that can be used to insure the success implantation of SDL in training program

Methods:  A cross sectional survey administered among pediatric residents and faculties from July -November 2016 in Hamad General Hospital, main tertiary hospital in Qatar. It includes; details of demographics, perception, attitude and experience toward Self-directed learning concept. Questions offered objective answers utilizing 5-point Likert scale that can be used to perform statistical analysis.

Finding:  Out of 99 respondents, 50%residents and 49%faculties.90percentage of both perceived lifelong learning as necessary to physicians. Good understanding of SDL and how to construct effective Individualized Learning Plan

(60%) and (50%) respectively. Faculty can assess their own skills (80% vs 50 %, P=0.03), but less comfortable helping their resident write goals (45%vs 30%)

Discussion and Conclusions:  Faculty believe that SDL improve patient care. they comfortable identify area of strength and improvement compared to residents .Residents and faculties have different attitudes and skills related to self-assessment and SDL, Better understanding their knowledge and experience will guide residency program on how best to teach and further develop these skills.

Postgraduate residents desire more guidance on how to engage in SDL, Residency programs need to provide explicit education during early years of the residency training on process of SDL, while Faculty modeling of SDL motivate learners and provide opportunity to demonstrate the process


## 202
## Communication for equity in healthcare: description of an educational intervention

**Anna Höglund, Uppsala University**
**Marianne Carlsson, Uppsala University**
**Inger Holmström, Uppsala University**
**Elenor Kaminsky, Uppsala University**

Background: The service Swedish Healthcare Direct (SHD) is staffed by 1.500 registered nurses (RNs), located at 33 sites, who handle about 5.5 million calls yearly. Telephone RNs assess symptoms, recommend further healthcare visits or give self-care advice. Their task is to steer patients to an appropriate care level. They should also adhere to the requirements for equity in health for the whole population, as prescribed in the Swedish Healthcare Act. The aim of the present study was to investigate if and how an educational intervention can improve awareness of equity in healthcare among telephone RNs and thereby improve their ability to communicate so that equity in health is secured.

Methods: The design was quasi-experimental, with one intervention group and one control group. Measurements were performed in both groups before and after an educational course in the intervention group. A study specific questionnaire was used, in which hypothetical persons of different age, gender and ethnicity were assessed concerning power over one's own life, quality of life and experience of discrimination. The educational intervention consisted of a web-based lecture, literature studies and a seminar, covering aspects of inequality in healthcare related to gender, age and ethnicity. Gender and intersectionality theories were presented as explaining models.

Findings: The educational intervention was evaluated as "good" or "very good" by all participants. The seminars and the questionnaires trigged discussions on equity in health, both during the intervention and afterwards, in the workplace of the intervention group. However, few significant differences before and after the intervention were found in the measurements of the two groups. The reason might be that the instrument used was not sensitive enough to pick up an expected raised awareness, or that solely the act of filling out the questionnaire can create a sort of intervention effect.

Discussion: Equity in health still needs to be educated and discussed in different healthcare settings. The described intervention can be one way to increase awareness and communication skills concerning equity in health among telephone RNs, but it can easily be adjusted to suit other professional groups.


## 203
## Toward a Comprehensive Approach to Rotation Experience: For Effective Communication and Translation of Clinical Knowledge

**Zohar Levites, North Florida Regional Medical Center**
**Yulia Strekalova, University of Florida**

Background. Acquisition of skills and clinical hands-on training is a key outcome of successful clinical residency training, which is achieved through 4-6 week rotations. In surgical, critical care, and emergency medicine specialties, difficult airway management is a critical aspect of training and practice. The training emphasis for airway rotation is placed on intubation techniques that can be used during regular and difficult airway scenarios. The key outcome of

a successful rotation is knowledge transfer, which remains a challenge as airway management remains one of the main complications for intensive care units and emergency departments.

Previous research on medical education has identified experiential, teacher- centered and learner-centered approaches to medical training (Spencer&Jordan,1999). The goal of this study was to describe and qualitatively evaluate a comprehensive, care-centered approach to rotation experience.

Methods. This formative study was guided by qualitative assessment and direct observation principles (Patton,2016) and action research (Meyer,2000).

Findings. Reported findings are based on the record of action-reflection (Meyer,2000) of the first author, a practicing anesthetist. In line with existing research, previously observed rotation experiences and methods of teaching that informed this study included experiential learning concentrated on a narrow goal of airway rotation with no feedback and teacher-centered, hands-on rotation that was defined by an educating provider's situational and individual experience. However, both of these approaches can give ground to ethical dilemmas (Baker et al.,2011). Learner-centered, narrow training with written feedback with a scale-based score is another option, which is currently used by about 60% of airway rotation programs (Hagberg et al.,2003). Through our action research we propose to put forth a comprehensive, care-centered approach based on the communication and translation of practical, theoretical, and research-related knowledge relevant but outside of the direct purpose of the airway rotation.

Our initial assessment showed that that the last approach leads to greater learner engagement and motivation explore additional written materials and practical skills and essential knowledge for their overall clinical competencies.

Discussion. Focused, skill-based rotations that include complementary and progressively multiplex knowledge from associated subfields can enhance residents' learning experience and outcomes as well as promote care-centered approach to resident education.

## 204
## Impact of patient engagement in action (PHEinAction) in bariatric surgery: A mixed-methods study

**Julia Menichetti, Department of Psychology, Università Cattolica Del Sacro Cuore**
**Annamaria Kulla, Department of Bariatric Surgery, UCO of Clinical Surgery, University Center of Bariatric Surgery, Cattinara Hospital**
**Aslak Steinsbekk, Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology**
**Guendalina Graffigna, Department of Psychology, Università Cattolica Del Sacro Cuore**

Background: Obese patients awaiting bariatric surgery could benefit from patient engagement support. However, there are few intervention studies aimed at patient engagement support in general, and none targeting pre-bariatric surgery patients. Based on the Patient Health Engagement (PHE) theory, a nurse-led intervention called PHEinAction has been developed. It comprises at least two individual face-to-face sessions with support personalized to participants' engagement needs and home-based written exercises eliciting emotional, behavioral, cognitive activities between the sessions. This study aimed to describe the changes in patient engagement among patients waiting for bariatric surgery immediately after participating in PHEinAction and to explore their experiences accounting for these changes.

Methods: A sequential exploratory mixed-methods study with a quantitative pre-post evaluation with self-reported questionnaires followed by a qualitative study with semi-structured individual interviews was conducted. The questionnaires were Patient Activation Measure (PAM, range 0-100) and Patient Health Engagement Scale (PHE-S, range 1-4). Changes in PAM and PHE-S were analyzed using Wilcoxon signed-rank tests for paired samples, whilst interviews using a thematic inductive approach.

Results: Among the seventeen participants, there was a significant improvement in PHE-S scores from 2.7 (arousal-adhesion position) at baseline to 3.3 (adhesion-eudaimonic project position) at the end (p=0.004). Results for PAM were similar, from 61.5 at baseline to 70.2 at the end (p=0.012).

The participants' experiences accounting for these changes were categorized into the following themes: (i) viewing and tracking feelings and progresses on paper; (ii) having an "open-ended" structured space to deepen the emotional and existential aspects of obesity; (iii) working for small goals tailored to individual needs; (iv) being socialized to value individual responsibility for change by a trained professional.

Discussion: In this exploratory study, PHEinAction had an impact on patients awaiting bariatric surgery. The likely mechanism is that they felt more confident in taking care for their health due to the structured verbal and written communication helping them to reach a deep understanding of their own situation. Further studies are needed to confirm these results and to clarify if PHEinAction can have an impact on the outcomes after bariatric surgery.

## 205
## Evidence-based health information for hard to reach target groups – a pilot project

**Beate Wiegard, Institute For Quality And Efficiency In Health Care (IQWiG)**
**Beate Zschorlich, Institute For Quality And Efficiency In Health Care (IQWiG)**

Background: The Institute for Quality and Efficiency in Health Care (IQWiG, Germany) provides evidence-based health information for the general public. Its primary medium for doing so is the bilingual website

gesundheitsinformation.de / informedhealth.org. Not all people are reached through websites, though: For example, people who are socially disadvantaged tend to search for health information on the internet less often – despite frequent health problems. They may also have difficulties reading and understanding longer passages of text.

There are also challenges associated with the principles of evidence-based health information: Health information is meant to communicate research results, refrain from offering advice and enable readers to make informed decisions. Finally yet importantly, it must be attractive and interesting enough to catch readers' attention. Taking all these aspects into account and keeping it short and simple is a challenging task.

Methods: As people who are socially disadvantaged often have a special need for information, IQWiG started a pilot project. It produced posters and leaflets on three common health problems: chronic obstructive pulmonary disease (COPD), head lice and fever in children.

The posters and flyers are condensed versions of evidence-based health information from the website. They focus on practical issues and are supplemented by photos and illustrations. The material underwent a user testing before final versions were produced.

Posters and leaflets were send to local health authorities who expressed interest. The health authorities were asked to distribute the material and assist in an evaluation via questionnaire.

Findings: The test users gave the posters and leaflets high ratings, especially because of brevity, layout, comprehensibility and informational content.

The health authorities also rated both contents and formats highly and considered topics concerning children particularly relevant. They were especially interested in infectious diseases as further topics and would welcome information in other languages. Additional visuals and an app would be appreciated.

Discussion: The new material was well received by both user testers and local health authorities. Access to the target group remains a challenge, however. It is unclear whether the target group "socially disadvantaged people" could be reached via local health authorities.

## 206
## Three scenarios for implementation of an app-based recording feature at a Danish hospital

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**Anne-Mette Honoré Grauslund, Health Services Research Unit, Lillebaelt Hospital**
**Jette Ammentorp, Department of Regional Health Research, University of Southern Denmark**

Background: Despite evidence promoting audio recording of consultations as beneficial for patients and their relatives, implementation is still not common practice. One of the reasons has been lack of implementable technology as the devices used in former studies have not been feasible for routine clinical use. However, technological advances and increased availability of digital devices has made it possible to develop an app-based recording feature that enables recording and replay of consultations. This differs from patient initiated recording as it uses an official health app which connects to the patients' electronic record offering data privacy and security in terms of storage of the recordings. Nevertheless, the question of choosing a suitable implementation strategy that meets the demands of both patients and healthcare professionals (HCP) remains unresolved.

Methods: A qualitative study was conducted in order to gain knowledge to use for the development of potential implementation strategies. A total of nine focus groups were conducted including three different target groups: HCPs already familiar with recordings of consultations, HCPs with no prior recording experience, and patients/relatives with no prior recording experience. In addition, a workshop on pros and cons with regards to implementation of recordings of consultations in clinical practice was held with a diverse group of stakeholders. A qualitative thematic analysis focusing on statements regarding implementation was performed.

Findings:  Three different implementation scenarios including pros and cons from the perspective of patients, relatives and HCPs could be described. The scenarios were as follows:

- Routine care: all consultations are recorded in every outpatient clinic at the hospital

- Patients request: consultations are recorded when patients ask for a recording

- HCPs decide: consultations are recorded when HCPs finds it relevant

The majority of patients and relatives preferred the first scenario whereas HCPs advocated for the second or third scenario.

Discussion: The description of the scenarios and conflicting preferences between patients/relatives and HCPs highlights the difficulties with implementation of recordings in clinical practice. Consequently, this work contributes to a further discussion of the implementation strategy with the hospital board, head of departments and the Patient & Relatives Council at Lillebaelt Hospital.


## 207
## Information visualization and health care communication: lessons from a postgraduate program

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**Mª Carmo Botelho, ISCTE - Instituto  Universitário de Lisboa & CIES**
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**Sara Rodrigues, Faculdade de Belas-Artes, Universidade de Lisboa**
**Elsa Cardoso, CIES - Instituto  Universitário de Lisboa**
**Luís Rodrigues, IMAR - Instituto do Mar, Universidade dos Açores**

Background: The postgraduate program in information visualization, a partnership between ISCTE - Instituto Universitário de Lisboa and Faculdade de Belas-Artes - Universidade de Lisboa, presents a framework based on four disciplines – information design, data visualization, visual analytics and data journalism. The program addresses the growing need for postgraduate training in the field of visual communication of complex information. This need is particularly true when it comes to effectively communicating health-related issues, specifically those related to public health campaigns and the ones relating to the learning of information communication in the context of health education.

Methods: The information visualization postgraduate program combines a theoretical-practical teaching approach where historical and contemporary case studies on health communication are presented, analysed and discussed. Examples of these are John Snow's map of London cholera outbreak (1855) or Florence Nightingale's rose diagram of the causes of mortality in the British army in the East (1858) and, more recently, Hans Rosling's Gapminder (2005) or The Impact of Vaccines in the Wall Street Journal (2015). Health information dissemination and health literacy improvement are also topics developed by students in project practice, underlining a constant concern for promoting accessible and understandable information of social relevance.

Findings: One of the program expected outcomes is the acquirement of information visualization skills in the field of health communication. An information poster designed in partnership with an NGO on the subject of 'premature births' was one of the projects developed that was subsequently successfully used in several public presentations.

Discussion: The information poster illustrates the outcome of the interdisciplinary pedagogical approach and demonstrates that the use of clear language and appealing visual representation of data is critical for identifying risks, preventing mistakes or understanding health care benefits. The poster reveals the potential of information visualization to increase public awareness on health issues. But it also showed the importance of specific training for specific communication needs: more effective health related visualizations depend on better trained health specialists and health related professionals.

**208**

**Training trainers to meet the Clinical Communication Skills needs of increasing numbers of medical students at Cambridge University.**

**Mandy Williams, Cambridge University Hospitals Trust**
**Debbie Critoph, Cambridge University Hospitals Trust**
**Kim Taylor, Cambridge University Hospitals Trust**
**Rachel Williams, Cambridge University Hospitals Trust**

Background: Cambridge University provides clinical communications skills (CCS) for medical students via experiential learning in groups of six.

In 2017 the university doubled the annual number of clinical students from 140 to 280. This challenged the CCS department to expand the workforce to deliver over 1000 high quality experiential sessions annually, without increasing group size.

Methods: This presentation describes the steps we have taken which include:

- Adapting our core facilitator training programme to actively recruit and train interested health care professionals to become highly skilled, enthusiastic CCS facilitators.

- New recruitment process

- Pre-programme questionnaire

- Core training: observation of a a CCS session, experiential training day, post training day observation, 2 co-facilitated training sessions and 2 training sessions delivered under observation.

- Additional training resources for new and experienced facilitators, via a virtual learning environment (VLE).

- A learning journal for self-reflection.

- Allocated mentors in the first 12 months.

- A support programme for experienced facilitators.

- Twice yearly masterclasses.

- Post-programme questionnaire and evaluations

Findings: We have run core training three times, totalling 18 participants. We have a further four programmes planned in 2018 (38 participants in total).

External trainers from the UK Council have observed each training day and in combination with evaluations from participants, modifications have been made to the day.

We are currently recruiting 5 new trainee facilitators per month. Time to complete training varies but we estimate that by September 2018 we will have added a further 10-12 fully trained facilitators to our team.

Discussion: Increasing the training workforce to meet the demands of an increased student population is required if we are to retain experiential learning in small groups

This programme is helping Cambridge to meet the demand and continue to deliver high quality training via skilled facilitators and is a model that may be transferable to other organisations.

Although we are unable to retain all of our future facilitators (many will leave Cambridge as their career develops), we believe that we are equipping clinical role models with skills to demonstrate and provide effective CCS feedback. This will influence a wider population beyond Cambridge students.

**209**

**Development of the Curriculum "Communicative Competences" for the three year nursing education in Germany**

**Ingrid Darmann-Finck, Institute for Public Health and Nursing Research, University of Bremen**
**Sabine Muths, Institute for Public Health and Nursing Research, University of Bremen**

**Sebastian Partsch, Institute for Public Health and Nursing Research, University of Bremen**

Introduction: In the context of the German National Cancer Plan, this project, funded by the National Ministry of Health, aimed at developing a semi-structured curriculum for promoting communicative and counseling skills in the training of nurses. The first project phases focused on the curriculum objectives, the content, the methods of teaching and learning, and the order of curriculum modules.

Methods: The research questions were addressed by conducting a comprehensive literature review, which covered three aspects: (1) A theoretical framework for "communication in nursing"; (2) The effective components of promoting communicative; and (3) The communication needs of nursing patients. Results were converted into a three-year nurse education curriculum, taking into account theories of developmental psychology and nursing didactics.

Results: The curriculum was developed according to different developmental principles and contains modules for the first three years of training, which consecutively build on each other (cf. BeckerMrotzek 2008; Benner 1994; Habermas 1971; 1974; Krüger/Lersch 1993). The different modules refer to the teaching of knowledge, the training of rule-guided practical skills, the promotion of comprehending oneself and others, and the ability to communicate in a way that facilitates understanding (cf. Darmann-Finck 2010). The modules also address an improved awareness of conflicting requirements of communication and the ability to recognize and use opportunities for self-determination and participation. The level of requirement of the modules increases in the course of the three-year education.

Discussion / conclusion: Best practice examples for a three-year curriculum to train communicative competence do not exist. Therefore, theories of developmental psychology and nursing didactics were used to inform the curricular structure. Next steps of this project will include implementation and evaluation of the curriculum at different nursing schools.

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## 210
## Investigating the key factors in designing a communication skills curriculum for medical students

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**M.Mahdi Hazavehei, Hamedan University of Medical Sciences**
**Hossein Karimi Moonaghi, Mashhad University Of Medical Sciences**
**Babak Moeini, Hamedan University of Medical Sciences**
**Abbas Moghimbeigi, Hamedan University of Medical Sciences**

Introduction: Medical students need to acquire communication skills to improve their future professional role as a physician. Effective training of communication skills requires expert curriculum design. The aim of this study was to explore the experiences of experts and stakeholders in order to design a curriculum in communication skills for medical students.

Methods: The content analysis approach was used in this study. Forty-three participants were selected from the faculty, nurses, physicians, and medical students using purposive sampling. The data were collected through focus group discussions and semi-structured interviews. To ensure the accuracy of the data, the criteria of credibility, transferability, dependability, and conformability were met. The data were managed by MAX QDA and analyzed using the Graneheim & Lundman model.

Results: The findings consisted of two main themes, "The vast nature of the present communication skills training" and "administrative requirements of the communication skills curriculum." The themes included the students'

educational needs, problems associated with training students to have good communication skills, importance of good communication skills in performing professional duties, communication skills and job requirements, learning environment of communication skills, status of existing curriculum for communication skills, strategies and suitable methods for teaching and evaluating medical students' communication skills.

Discussion: This study discovered the components of proper communication skills curriculum for medical students. The results of this study can be useful for medical schools in designing a training program for teaching communication skills to medical students.

## 211
## Advanced educational package in empowering patient education

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Jenni Koskinen, University Of Turku, Department of Nursing Science
Sanna Salanterä, University Of Turku, Department of Nursing Science
Helena Leino-Kilpi, University Of Turku, Department of Nursing Science

Background:  Empowering Patient Education Package (EPE, 25 credit points) is arranged in the University of Turku, Finland, Department of Nursing Science. Educational objectives are learning to describe a theoretical and methodological basis for EPE from the perspectives of patient, personnel, health care organization and society, to analyze and do research in EPE as well as to implement and evaluate EPE in clinical settings and research.

Methods:  EPE Package is designed for Finnish and international health care professionals, leaders, master and PhD students, teachers and researchers in nursing and health sciences.  The Package contains five modules: 1) orientation and conceptual basis of EPE, 2) diagnostics in EPE, 3) patient education as an empowering intervention, 4) evaluation of EPE, and 5) special issues based on students own clinical areas. The teaching methods include lectures, interactive networking and completion of a written paper from a chosen perspective of EPE.

Findings:  Altogether 152 students (84 foreign) have completed the Package in 2008-2017. Most of the participants have been students of nursing or health sciences. The students have been from 12 European countries, India and the United States. Evaluation information has changed learning methods more interactive and online so that currently four of the modules are carried out online and one module as contact teaching including lectures and seminar working.

Discussion:  EPE Package has provided an international patient education expert network and information about EPE in health care organizations and in health care education as well as research collaboration in the field of patient education.

## 212
## An Art and Skill: Exploring Teaching Communication Skills For Medical Students

Nicoll Manhica, University Of Iowa Carver College Of Medicine
Katherine White, University Of Iowa Carver College Of Medicine
Marcy Rosenbaum, University Of Iowa Carver College Of Medicine
Patrick Barlow, University Of Iowa Carver College Of Medicine

Background:  The methods and frequency of faculty explicitly teaching medical students in clinic research has focused on student and faculty report. Through direct observation, this study identified methods faculty utilize in teaching CS. Faculty teaching methods were evaluated prior to a faculty development intervention informing faculty of key CS teaching methods and opportunities.

Methods:  All clinical teachers supervising medical students as part of a required Outpatient Internal Medicine (OIM) clerkship and all M2 and M3 students rotating on the clerkship during the study period (May 15 – Aug 15) were invited to participate in the study. Focus group interviews with medical students and one to one interviews with faculty focusing on if and how CS was being taught during clerkships were audiotaped. Clinical teachers were

observed for 2-4 hours teaching medical students in the clinic. Interactions out of the room were audiotaped and transcribed and observation notes were taken during in-room interactions. Audiotapes and observation notes were transcribed verbatim and entered into the QSR NVivo10 program for data coding and analyzed to identify common themes.

Findings: Subjects included OIM faculty (N =29) and M2 and M3 students (N=45). 63 faculty-student encounters in the context of patient care (cases) were observed, including 37 cases of staffing (student presentations to faculty) following student interviews with patients. Three main approaches to clinical teaching were identified including (1) role modeling, (2) faculty observing medical student- patient interactions, and (3) responses to student presentations/staffing. Faculty and students described role modeling as the most commonly used clinical teaching technique for addressing CS. Results will be discussed.

Discussion: While faculty and medical students agreed that CS teaching in clinic was important, the priority for CS teaching was low due to various barriers. The study highlights the limited CS teaching that occurs in clinics. Thus faculty may be missing important CS teaching opportunities. Findings from this study have implications for faculty teaching directed at explicitly incorporating CS teaching into common clinical teaching encounters. Increasing CS teaching during clinical learning has the potential to help students enhance their CS throughout their medical training.

## 213
## Multidisciplinarity at heart: Empowering Standardized Patients to be Communication Trainers

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Background: At our University of Applied Sciences all Bachelor programs in the health professional department are working with standardized patients (SP) in various settings to enhance communication skills. Specifically trained SPs are taking over the roles of communication trainers. In this setting no other tutor is present. Besides giving a subjective feedback communication trainers are also able to coach the students in their learning processes. The faculty has an internal "Train the Trainer" program in order to prepare the actors and actresses for their tasks. The aim of the study was to evaluate, which competencies are needed, if SPs do communication trainings in this advanced way and how these competencies can be developed. They build the ground on which a course of continuous education for professional actresses and actors with the name CAS InterActing was developed. The aim of that course is to empower the participants to develop, perform and evaluate communication trainings for various clients.

Methods: In 2016 a multidisciplinary research group from the theatre and the health professional department finished a qualitative research study. The project included on one hand an analysis of performances (participatory observation) and on the other hand semi-structured focus group interviews with all involved parties (students, communication trainers, faculty). For the qualitative content analysis a deductive as well as an inductive approach was combined.

Findings: Five main categories were found, which described the main competencies communication trainers need, e.g. dealing with different roles and functions, applying communication concepts, attentiveness on multiple layers etc. Out of these competencies the CanMEDs model was adapted for the developing profession of communication trainer. The adaptation contains the following roles: actor/actress, manager, tutor/learner, moderator and innovator. Those lead to the development of a curriculum for advanced studies which is called CAS InterActing.

Discussion: Advanced communication trainings correlate with in-depth communication skills. Our analysis leads to the conclusion that there is a need not only for internal training but also for structured programs in advanced studies. These include three main dimensions: a) Communication and Learning, b) Advanced theatre techniques, c) Management.

## 214
## THE LIFE' S CLOCK – A GROUP EDUCATION INTERACTIVE METHODOLOGY

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Background: "Life's Clock" is an educational tool created by Portuguese Diabetes Association for group education of people with diabetes. It allows to evaluate daily behaviours related to nutrition and physical activity, correlated with insulin therapy and metabolic control. Participants consider this methodology: very dynamic, educational, adequate contents, and "a good way to talk about own experiences and daily diabetes management".

The objective is to evaluate the results of a training the trainers programme with "Life's Clock".

Methods: 58 Primary care and Hospital nurses from all over the country were trained to guide the "Life's Clock" with people with diabetes during a Group Education Seminar, October 2016. The training the trainer sessions had 6 hour duration and included role-plays of group education sessions. The nurses were trained to use dynamic methodologies, providing an interactive learning based on participants' experiences.

During follow-up training, March 2017, 20 nurses presented their experiences related with the implementation of group education sessions with "Life's Clock" addressed to people with diabetes at their institutions.

Findings: Relating to training satisfaction evaluation, nurses considered training as Very Good or Good: global - 100%, contents - 98%, trainers' motivation capacities/competences - 98%. Nurses considered they acquired capacities to manage group sessions.

This methodology was considered by participants as an important tool for group education, with great practical applicability, simple, clear and understandable, for people with diabetes to reflect and acquire more knowledge, strategies and competencies in relation to diabetes management, providing the exchange of experiences between the group of participants and the health care team and promoting the improvement of self-care.

Discussion: The overall acceptance and motivation of participants in relation to Life's Clock training and implementation was good.

Participants emphasized that Life's Clock is a group education activity that can help people with diabetes overcome difficulties, providing greater autonomy in relation to diabetes management.

Participants who developed the programme valued the experiences regarding applicability, flexibility and versatility in the use of this educational tool, highlighting the usefulness and importance of contributing to understanding the relationships between the various aspects of diabetes treatment and the experiences' exchange between peers.

**215**
**Physician HPV Health Literacy: A Review of Medical School Curricula for HPV-related Content**

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Background: Although vaccination against cancer is monumental, uptake of the HPV vaccine in the US is low. Healthcare provider recommendation is the single best predictor of adolescent HPV vaccination, yet studies have found that providers are not consistently recommending HPV vaccines. Studies have also found that medical students have inadequate knowledge of HPV. Medical students are a key audience for HPV-related training because of their impending role as health care providers. We conducted a comprehensive review of medical school curricula to better understand what accredited schools of medicine and osteopathic medicine are teaching in terms of HPV, the HPV vaccine, and recommendation practices.

Methods: A link to an online survey was emailed to all Academic Deans (n=180) at the accredited Schools of Medicine and Osteopathic Medicine in the US. We employed an abbreviated Dillman method and sent 3 emails to Deans: 1) a prenotice, 2) an email with the survey link, and 3) a reminder email. The survey included four questions pertaining to whether HPV-related content is taught in required courses, what courses teach the content, and what content is covered within those classes. Deans were also asked to include faculty email addresses for those who teach the content and the appropriate faculty were contacted. All participants answered a 4-question survey about

HPV-related content in their curricula. The surveys were completed through a software program called Qualtrics and included an abbreviated informed consent prior to survey administration.

Findings: Data collection is in progress. Preliminary analyses reveal that content concerning HPV and HPV prevention practices is taught in a concentrated number of courses (i.e. Microbiology & Immunology). However, variability and gaps in the method of delivery and course content related to HPV and HPV-related cancer prevention were found. Faculty surveys will provide further insight into teaching methods and HPV-related content taught in their classes. Final analysis of data will be presented at the conference.

Discussion: Upon completion of this research, we hope to be able to identify geographic and demographic trends in US medical school training regarding HPV-related content and make recommendations of ways to strengthen HPV-related medical school curricula.

## 216
## Medical Students attitudes toward Communication Skills Learning

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Background Despite the importance of medical students' attitudes toward learning, few studies have explored medical students' attitudes toward communication skills learning (CSL). This will enable teachers and curriculum planners to monitor changes in specific components of attitudes among students and to adapt communicational learning outcomes and teaching methods during medical school.

Methods The objective of this study has been to explore the attitudes of medical students toward learning communication skills and to compare our findings with reports from other countries. All medical students inscribed in UFV-University in their first and fourth year. We used CSAS because this tool has been most widely used and validated. All four year students received a CSL Program in diferent topics along previous years. The methodology of this CSL Program was mainly "experiential": students attended workshops in small groups interviewing a Standardized Patients (SP) and receiving feedback from peers, and SP.

Findings Participants: 220 students (First/Four year=114/106); females 166 (75.4%); medical parents 74 (33.6%). Good CSL self-perception: 115 (53.7%), improveable: 82 (38.5%). First year students showed more positive attitudes towards CSL than 4th (52.8/50.6;p=.02) and towards an experiential learning (51.3/49.3;p=.02). Males showed more negative attitudes towards CSL (34.1/32;p=.01) and towards experiential learning (48.6/51.1;p=.01)

Discussion This cross-sectional study assess medical students' attitudes towards CSL. Most remarcable finding is that our students decline their positive attitudes towards CSL from first to fourth year. This decline is mainly a decreasing of "affective" attitudes (i.e., their feelings towards and experience from the way communication skills have been taught in our school) but not the "cognitives" attitudes (fundamental beliefs regarding CS), which remain. Because we measured students' attitudes before (first year students) and after (four year students) communication skills interventions, these findings suggest that these attitudes may change (i.e. get worse) over time perhaps as a result of learning communication skills. Females students have more positive scores both global and affective attitudes. These findings correspond well to those from other studies.

## 217
## Consolidating Communication Skills for Breaking Bad News during Residencies in General Practice: The development, evaluation and implementation of a Training Program on Coaching Communication Skills for Supervisors in Belgium.

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Background:  General practitioners (GPs) in a large number of countries are expected to play an increasingly important part in supporting seriously ill patients throughout their illness trajectory. For this, sound communication skills are indispensable. Research tells us that despite the growing attention for communication in medical school-still too many GPs are insufficiently skilled in this area. For GPs in training, the residency is a crucial moment to consolidate communication skills. We aim to develop a training-program to better equip GP supervisors in Belgium for coaching residents on breaking bad news.

Method:  Based on an overview of existing training programs, existing research and guidelines a training program was developed and pilot-tested. After optimizing the program we will train 90 to 110 supervisors all over Belgium in 8 training sessions.

Behavioral change will be assessed by blind scoring video-registrations of participants with their residents before- and after participating; self-efficacy and attitudes through standardized questionnaires. For qualitative measures focus groups with residents of **participating GP's will be organized.** If results show that the training is effective, a strategy for implementation will be developed. Should no effects be found, the different measures can be used to indicate areas of improvement.

Findings:  A workshop -consisting of two three-hour sessions- was developed and pilot tested. The workshop treats four topics: 1) guidelines on breaking bad news, 2) identifying **"learnable"** units within communication, 3) coaching on handling emotions, 4) coaching patient centered care. During sessions participants reflect upon their skills and practice amongst each other: identifying learning goals and providing feedback based on pre-registered videos of "residents" with "patients".

After pilot-testing and optimization, the trainings will be carried out and evaluated between May and November 2018. Preliminary results will be available for the conference.

Discussion:  Communication training in medicine mostly focusses on courses within the curriculum, not yet on consolidating skills during residency. This is the first program for GP-supervisors on the coaching of communication skills for discussing serious illness. If proved effective and implemented widely, the quality of bad news communication in General Practice in Belgium is likely to improve over the upcoming years.

**218**
**Communication skills in teaching and practice of medicine: Perspective of FCS-UBI medical students**

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Background: Teaching in medicine has undergone several changes over time and communication skills have become a major topic in medical practice, making crucial their teaching in medical schools.

The objective of this study is to evaluate, from the perspective of medicine pre-graduated students, the importance of communication skills in medical practice and the FCS-UBI teaching curriculum in this area.

Methods: This is an observational, cross-sectional and empirical study based in a questionnaire what is an adaptation of the communication skills evaluated in the "European consensus on learning objectives for the core communication curriculum in health professions care".

Data processing and analysis were performed using the IBM SPSS, version 22.0® for Windows and Microsoft Excel ®.

Findings: A total of 181 students, in the FCS-UBI Master of Medicine 5th and 6th years (24.2 average of age), enrolled in the academic year 2014-2015, participated in this study. Most of the participants were female (65,2%), attended the 6th year (52,5%) and had a preference for practice in medical areas in the future (54,7%).

Students recognize the importance of communication skills in the practice of medicine and, despite expressing a lesser degree of agreement, also consider that the medical course of the FCS-UBI gives proper importance to these skills.

Most students agree that they are only partially prepared in relation to the field of clinical communication skills.

In the hierarchy of clinical skills, it was found that knowledge is the most important issue in pre-graduate medical education, followed by interpersonal communication skills.

It was verified that there is a significant association (p <0.05), in most cases strong, between how communication skills were taught throughout the course and the mastery of these by the students of the 5th and 6th year.

Discussion: Participants recognize the importance of communication skills in medical practice and that they are only partially prepared in this field. Effective communication should be a major goal for pre-graduated medical education to improve the future professional efficacy and clinical outcomes.

## 219
## Evaluation of a lecture to teach medical students how to communicate bad news

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Background:  Breaking bad news in clinical settings is a difficult and complex task with a huge impact in patients, families and doctors. Several studies have shown the need to improve the preparation of doctors on this task. This study aims to evaluate a lecture on breaking bad news.

Methods:  A 90 minutes pilot lecture on breaking bad news was given to 4th and 5th grade medical students of a Portuguese medical faculty. Two questionnaires were applied, Q1 before and Q2 after the lecture. 276 students (86% of total) attended the class, 268 answered Q1 and 227 answered Q2. Mean age of Q1 participants was 23.1 (SD=2.6) and 73.5% were female. Wilcoxon and Friedman tests were used to assess differences.

Findings:  Nearly forty-seven per cent of the students already faced a breaking bad news situation and 95.5% rated its difficulty as ≥5 in a 9 points scale. 59.7% declared only have had theoretical classes on this matter and 34.0% declared never had teaching classes on it. 93.7% don't know any protocols or techniques to break bad news and 96.6% never heard about the SPIKES' protocol. The teaching of this matters by the faculty in study was rated as ≤4 in a 9 points scale by 51.5% of the students. Results of self-perception evaluation of knowledge, competencies and confidence on breaking bad news, accessed at Q1 and Q2, using a 9 points scale, were: Knowledge: $\bar{x}_{Q1}$=3.58 and $\bar{x}_{Q2}$=6.58, p<0.001; Competencies: $\bar{x}_{Q1}$=3.40 and $\bar{x}_{Q2}$=5.85, p<0.001; Confidence: $\bar{x}_{Q1}$=3.17 and $\bar{x}_{Q2}$=5.47, p<0.001.

Discussion:  Medical students are aware of the importance and difficulty of breaking bad news in clinical settings. They evaluated negatively the teaching of this matter at the faculty in study and their knowledge, competencies and confidence on breaking bed news. After attending the 90 minutes lecture, the self-evaluation of knowledge, competencies and confidence on this matter rises sharply.

## 221
## Knowledge Based Communication in Ophthalmic Healthcare

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Background:  A high quality education of ophthalmic experts is necessary for medical care of presbyopia patients. Additional to intensive studies and training in the clinical environment, the education can be enhanced by communication with an intelligent tutor system. One unresolved problem is how the ophthalmic experts get the information on a best represented communication level in order to find better decisions concerning patient related treatment.

Methods:  The medical knowledge is represented by a semantic network with concepts and relations between them. The user (ophthalmic surgeon) communicates via a special Wiki system including reasoning processes. Furthermore user specified visualization of the patient related data enhance the learning effect by navigation through the semantic network. For extension of the current knowledge, structured patient data are used for learning correlations by subgroup analysis, a special kind of knowledge discovery methods.

Findings:  The computer based representation for ophthalmic knowledge is suitable and necessary for a high performed communication of the experts because they can learn concepts and relations in a semantic network. Additionally the learning effect is supported by knowledge discovery methods, based on the patients' data of the past time. It enhances essential the communication level by representation of the implicit hidden knowledge and a

useful visualization process between the operational equipment, the medical instances and the patient specific history. After transformation in association rules logical based representations were available and can be transferred into clinical settings. In our case, the structured data sets take account of about 80 parameters per patient. For different extended patient groups (100, 300, 500), one target and also multi target values were set for the subgroup analysis and the results are communicated in an easy understanding way.

Discussion: The system for the ophthalmic surgery education is running at a Karlsruhe hospital (ophthalmic department). So, healthcare can be supported by a formalized, computer based communication process. The knowledge, hidden in structured tables or lists can be extracted as rule based representation. This is an effective assistance power for communicating with the clinical experts.

## 222
## 'You are being asked to advise': written information provided to representatives of patients lacking capacity to consent to research

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Background: Patients with significant cognitive impairments who lack the capacity to make their own decisions about research participation rely on family members or healthcare professionals to make decisions on their behalf. The role of the family or healthcare professional is to advise researchers about the person's prior wishes and feelings, and to protect their interests. Written information about the research is usually provided to the patient's representative, however little information is provided about their role, or the appropriate basis for their decision, to help inform their decision-making. The aim of this study was to explore the written information provided to patients' representatives in order to understand information provision, and therefore the context in which such decisions are made.

Methods: Studies which included adults lacking capacity to consent were identified using the UK Clinical Trial Gateway database, and a representative sample (n=30) was randomly selected. Participant information sheets and other study documents were obtained, and relevant content was extracted. Content analysis was conducted through four stages: decontextualisation of the unit of analysis, recontextualisation, categorisation, and compilation. The data were summarised narratively according to each theme.

Findings: Considerable variance was found in the quantity and quality of the content. Most documents informed families and professionals about their representational role (representing the wishes, feelings and interests of the person), and consultation role (consulting with others). However, a small number of information sheets extended the role to consider the person's suitability or eligibility for the study. This addition is beyond the legal scope of the representative's role, and conflates professionals' clinical and representational roles. Incorrect use of terminology was frequently found, and a small number inaccurately interpreted the law regarding adults lacking capacity in research.

Discussion: Study documents lacked clarity and some omitted essential information. Although usually reinforced in practice with verbal communication, written information in its current form may fail to support informed decision-making by patient representatives. Recommendations include ensuring greater adequacy and accuracy when providing written information to those representing patients. Further research is needed to explore the information and decision-making needs of family members and healthcare professionals acting as patient representatives.

## 223
## The Turkish Society of Plastic-Reconstructive and Aesthetic Surgeons' Web Sites: Important Health Information Sources for Medical Tourism

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Background: Worldwide, it's observed that with healthcare providing aims ranging from wide-ranging operations to various cosmetic interventions are a part of medical tourism. In this context, Turkey is more advantageous than some other countries, due to reasonable prices, well-educated healthcare professionals, services with high standards, and reliable information sources especially regarding aesthetic surgeries.

In this study, the Turkish Society Plastic-Reconstructive and Aesthetic Surgeons (TSPRAS), which are important information sources regarding plastic surgery and have an important place with respect to medical tourism in Turkey, were investigated in line with the Health on the Net Foundation (HON) Criteria and the ethical rules for the web sites of the Society. Thus, their compliance with the standards was evaluated.

Methods: The researchers prepared a data collection form containing various fundamental features, the HON criteria and ethical rules of the Society. So, the web sites were evaluated by using this data form between 15 November 2016 and 15 April 2017.

Findings: It's found that there are 749 surgeons who are members of the TSPRAS. Of these 45,6% (342) had their own accessible, professional web sites. Also, 51,2% (175) of the physicians were located in Istanbul and only 23,4% (80) of them had web sites in English or other foreign languages. Moreover, 95,3% (326) of them provided their telephone number as a contact information on their websites. Only 33,9% (116) of the web sites fulfilled the ethical rules for the web sites of the Society. As a result, none of them met the HON criteria wholly.

Discussion: People, who want to get healthcare services outside of their own country, can reach to many different sources through the Internet to protect their privacy and they can make their preferences accordingly. This has significant importance regarding medical tourism as well. Unfortunately, the web sites of the Turkish plastic-reconstructive and aesthetic surgeons have many inadequacies in terms of qualification as an information source. It's proposed that the TSPRAS has to control the web sites and warn the owner in order to increase the quality on web sites to be more informative and reliable to meet the certain standards.


**224**
**Elaboration and validation of a Global Adherence Scale usable in the context of Acute Conditions (GASAC)**

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Study hypothesis: In the context of acute conditions, where communication is difficult, Patient Information Leaflets (PILs) could improve the exchange of information and Doctor-Patient Communication (DPC).

Objectives: To assess the impact of PILs on DPC and then, on satisfaction, adherence, and patient and doctor behaviours by a prospective controlled before-after study in two Emergency Departments.

Methods: Adults and adolescents > 15 years diagnosed with ankle sprain, diverticulitis, infectious colitis, pyelonephritis, pneumonia or prostatitis, received from the doctor a PIL along with an oral explanation. Seven to 10 days later, patients were contacted by phone to answer questionnaires.

Results: Analysis of the 324 patients showed that PILs improved the DPC score (range from 13 to 52): 46 [42-49] for 168 patients with PILs versus 44 [38-48] for 156 patients without (p-value< 0.01). The adjusted Odds Ratio for good communication (score >35) was 2.54 [1.27-5.06]. The overall satisfaction and adherence scores did not show significant differences. In contrast, satisfaction with healthcare professionals and timing of medication intake were improved. The overall satisfaction score improved significantly on per-protocol analysis. With PILs, the doctors prescribed less drugs and more examinations (radiology, biology, appointment with a specialist); the need for a new medical consultation for the same pathology was reduced from 32.1% to 17.9% (OR 0.46 [0.27-0.77]) and particularly in ED.

Conclusions: In emergency departments, PILs given by the doctor improve DPC, satisfaction with healthcare **professionals, reduce the number of emergency consultations for the same pathology and change the doctor's** behaviour.

**225**

**Influence of visiting walking-in homes for cancer patients on their well-being**

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Background:  Dutch cancer patients and relatives often visit one of the 90 walking-in-homes, offering contacts with fellow patients/relatives and support by trained volunteers, applying several complementary activities and psychological help. Visiting walking-in-homes means more communication about the disease, more contacts with co-patients/relatives, and talking about living with cancer and death. We studied whether the visits influence their well-being.

Method:  Interviews with 24 visitors explored the meaning of visiting homes. In a random quantitative study, 203 visitors answered standardized questions abou several aspects of the visit at T-1 and after 3-5 months (T-2). The well-being was studied by three questions on the quality of life (EORTC) and 10 validated questions about health complains, e.g. fatigue, sleeping, pain, breathing.

Findings:  The qualitative study confirms the meaning of the visits to the homes: increasing communication about life and death, and talks with fellow patients/relatives. At T-2 more elderly and still working cancer patients filled in the questionnaire than at T-1. A quarter did monthly visited the home and score very high on the meaning of the visits. The EORTC quality of life measure decreased unexpected significantly at T-2 (p.< .05) from 5.3 to 5.1 on a 7 point scale. The health complaints did not change at T-2 in comparison with T-1. To explain the decrease in quality of life, the influence of eight possible confounding factors were studied using multivariate analysis, e.g. social/medical characteristics, medical condition, co-morbidities, being an (ex)patient or relative with/without cancer,  health changes, stressful events, number of visits to homes, and perceived meaning of the visits. It shows that only the severity of the perceived health condition plays a role in the decrease of quality of life. For visitors with a better health condition at T-1 quality of life decreased significantly, while for more serious ill visitors quality of life did not change.

Discussion:  The results seem to indicate that for more severe ill visitors quality of life is maintained by visiting homes. This could mean that visiting a walking-in home by increasing their communication about their situation, does function as a buffer against decreasing quality of life.

**226**

**Health numeracy and the effect of pictographs on understanding treatment risks and benefits among Japanese adults**

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Background: If patients are to make a properly informed decision about their medical treatment, it is imperative that they receive information about the attendant risks and benefits in a manner they can readily comprehend. In this regard, presenting such information in graphic, rather than text, format has been demonstrated to have benefits in enhancing patients' understanding. Hitherto, no studies in Japan have assessed such understanding using graphic presentation of information. We therefore conducted the present study to assess health numeracy among Japanese adults and to identify the format (among text, bar graphs, and pictographs) that best elicited understanding of treatment risks and benefits.

Methods: We recruited participants from among individuals registered with a Japanese Internet. Participants were randomized to receive numerical information about the risks and benefits of a hypothetical medical treatment in one of three formats. The main outcome variable was adequate understanding. This variable comprised adequate verbatim and gist understanding. The primary independent variable was type of message format. The remaining independent variables were respondent sex, age, highest level of education, self-assessed living conditions, numeracy, and health literacy. We measured numeracy with the Japanese version of the three-item Schwartz numeracy scale, and health literacy with the Japanese version of the European Health Literacy Survey Questionnaire (HLS-EU-Q47).

Findings: In all, 1062 participants were subjected to analysis. We found only about half of our subjects were able to answer all three numeracy questions correctly. We found that adequate understanding of risk and benefit information increased linearly in the order of text, bar graphs, pictographs (P = .029); that was especially true for

women (P = .038), individuals with less education (P = .013), individuals with high numeracy (P = .027), and individuals with inadequate health literacy (P = .002).

Discussion: We believe that pictographs are the best format for most effectively conveying risk and benefit information. Health professionals and patient decision aid developers need to be aware of differential effect on patients' understanding of risk perception that is produced depending on how they present the information.

**227**
**Insufficient evidence: Why it can be crucial to put it into perspective**

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Background: The Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) to develop a decision aid on biomarker tests for women with early breast cancer. Biomarker tests estimate the recurrence risk and derive a recommendation for or against adjuvant chemotherapy. These tests are offered within the scope of healthcare provision. Some statutory health insurance companies cover the costs. However, there is no evidence that biomarker tests offer any benefits or harms for treatment decisions. Methods

Different sources were used to prepare a brochure:

1. Evidence on biomarker tests (final report D14-01, IQWiG)

2. Information needs of women (qualitative studies)

3. Manufacturer marketing (websites)

4. Routine care in early breast cancer (guideline)

5. The brochure was subjected to qualitative user testing.

Findings: Biomarker tests are advertised to help women with early breast cancer decide for or against adjuvant chemotherapy after surgery. Many women are anxious and unsure after breast cancer surgery and prone to the advertising promise of the manufacturers. They may overestimate the potential of the tests and rely on them without knowing their limitations. To make an informed decision, however, women need to know what biomarker tests can and cannot do:

Biomarker tests estimate probabilities. They cannot predict if a particular woman will have a relapse or not.

The therapy recommendation is usually based on the distant recurrence risk only. Local and regional recurrences are disregarded.

There is no scientific consensus on the question of which risk of recurrence is an argument for or against chemotherapy. The threshold may vary from test to test.

The therapy recommendation does not take into account individual aspects such as a woman's values or needs.

The women`s risk of recurrence is routinely determined by clinico-pathological criteria. There is no evidence that biomarker tests can determine the risk more precisely.

Discussion: A brochure on biomarker tests can convey all of this information. It cannot stand alone, however, which is mainly due to the insufficient evidence. Patient-centred doctor-patient communication is needed to clarify questions and weigh personal aspects.

**228**
**Preoperative conversations between anaesthetists and patients with obesity regarding perioperative risks and weight management: a structured narrative review**

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Background: Individuals with obesity frequently present for anaesthesia and surgery. Obesity greatly increases risks during surgery, as well as negatively affecting postoperative recovery and surgical outcomes. Anaesthetists are well positioned to explain these risks to patients in the preoperative period, however a recent survey of anaesthetists in Australia and New Zealand revealed many anaesthetists find it difficult to have these discussions. We planned a systematic literature review to assess existing guidance and evidence of effectiveness for how anaesthetists should best communicate with patients who have obesity in preoperative conversations about perioperative risks and weight loss management.

Methods: Database searches were conducted using keywords related to perioperative weight loss conversations. The resulting literature was summarised utilising thematic analysis.

Findings: No papers were found that addressed the primary aim. The literature closest to this aim was analysed in the form of a narrative review. We reviewed 95 full-text papers for thematic analysis. Four primary themes were identified: barriers to conversations, communication tools, communication language and specific recommendations. Identified barriers to these discussions were lack of skills, training, and time for clinicians. Established discussion tools including motivational interviewing (MI) and the '5A's' approach (Assess, Advise, Agree, Assist, Arrange) hold promise for improvement in future preoperative conversations. The papers highlighted a need for empathetic language, including use of patient-specific language where possible.

Discussion: Ultimately, there is no existing literature to directly guide anaesthetists in having effective perioperative communications with patients who have obesity. The majority of guidance for weight loss conversations comes from the primary care setting. Broad guidelines for perioperative risk and weight management discussions are suggested, based on the thematic analysis from the narrative review. It is hoped that these broad guidelines can improve communication between anaesthetists and patients in the preoperative period.


**229**
**Translation and adaption of two instruments to measure health-care professionals' perspective on shared decision-making implementation**

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Introduction: Many cancer patients want active engagement in treatment decision-making. In order to evaluate the barriers and facilitators for shared decision-making (SDM) implementation, psychometrically measures are needed. The Organizational Readiness for Implementing Change (ORIC) assesses change commitment and change efficacy. The IcanSDM measures appropriateness of SDM and perceived ability to adopt SDM. Both measures are not available in German. The aims of the study were 1) to translate the English versions of ORIC and IcanSDM to German, 2) to adapt after assessment of understanding by target population, and 3) to psychometrically test the two measures.

Methods: The two measures were translated into German by recommendations from the team translation protocol TRAPD (Translation, Review, Adjudication, Pretesting and Documentation). Comprehension of the translations was tested via cognitive interviews with clinicians (n=11). Psychometric testing will be conducted by applying the measures to clinicians before and after implementing a multicomponent SDM-implementation program.

Preliminary Findings: Clinicians of different professions (nurses = 8, physicians = 3), gender (f = 9, m = 2) and different years of experience in oncology (<5 yr = 3, 6-10 yr = 4, 11-20 yr = 3 yr, >20 yr = 1) took part in the cognitive interviews. The translation of the ORIC and IcanSDM was successful. Most of the items were understood well and did not need further revision. One item in each measure needed several cycles of adaptation to reach adequate acceptance. Psychometric results of the two measures will be presented at the conference.

Discussion: For fostering SDM implementation into routine care, it is essential to evaluate acceptance of SDM and readiness for change. This study provided the first German versions of the ORIC, which is also usable to evaluate other changes in organizations, and the IcanSDM, a new measure for SDM-specific appropriateness. Preliminary results suggested that the translated and adapted measures could be helpful instruments to evaluate SDM implementation from the health-care professional's perspective.

**231**

**Who makes the decisions in the treatment of advanced prostate cancer?**

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Background: The benefits of involving patients in decision-making, such as increased patient safety and compliance with the chosen treatment, are well documented. Shared decision-making is an acknowledged method to promote patient involvement. However, research has shown that the approach is complex, timeconsuming, easily influenced by organizational factors, and requires specific communication skills training of health professionals. In the treatment of advanced prostate cancer, the choice is often narrowed down to a choice between different types of hormone deprivation therapies, all associated with unpleasant physical and psychological side effects, or no treatment. Research related to the decision-making and the influence of organizational factors on patient involvement in relation to this patient group is limited. The aim of the study is to explore the communicative processes between patients with advanced prostate cancer and health professionals regarding treatment-related decision-making; and to investigate organizational possibilities and limitations in relation to patient involvement.

Methods: Using participant observations data is collected in a urological outpatient clinic. Furthermore, qualitative interviews of 15 patients with advanced prostate cancer and health professionals involved in the treatment of the patients are conducted. Paul Ricoeur's theory of interpretation is used to interpret the data.

Findings: Data from the observation showed that communication is mainly focused on informing patients about their illness and the overall treatment method. In general, only a few of the possible side effects are mentioned. Usually, the patient is offered a particular type of treatment and asked if "he accepts it". Patient's preferences and demands are rarely asked about. Overall, the patients are satisfied, and they express their trust in the doctors whom they consider to be experts and capable of making the right decisions.

Discussion: The findings will contribute with nuanced knowledge of patient involvement in the treatment of patients with advanced prostate cancer. Potentially, this could lead to improved patient communication, greater patient influence on treatment, and increased patient satisfaction.

Finally, when training health professionals' communication skills, the findings could be advantageously considered.

**232**
**Barriers and facilitators of shared decision making in older patients with chronic conditions; a systematic review**

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Background: For older patients deliberations about decisions are often influenced by the complexity of other chronic conditions they experience. The aim of this research was to describe barriers and facilitators of shared decision making (SDM) that older patients with multiple chronic conditions (MCC), their informal caregivers and health professionals experience.

Methods: A systematic literature review was conducted. Medline, Embase, PsycINFO, Cinahl and Central were searched from 1980 to September 2017 on studies about older adults with MCC and SDM. Two reviewers independently screened titles, abstracts and full-texts; abstracted data and performed a quality assessment.

Findings: Our search resulted in 4633 articles of which eighteen were included in the review. From these eighteen studies 120 barriers and 57 facilitators were retrieved. Main barriers of older patients with MCC to SDM are experiencing an acute event and feeling no permission to participate. Having MCC complicates SDM due to the involvement of many health professionals for the different conditions of the patient. On the other side, having MCC also facilitates SDM because of the previous experiences patients living with MCC have in communicating with health professionals. Informal caregivers often feel a lack of permission to participate in the SDM process. Informal caregivers facilitate SDM by providing information about the patient and assisting the patient in decision support. Barriers for health professionals are poor interpersonal skills, organizational barriers such as time pressure and high turnover of patients. Main facilitator for SDM is the ability of health professionals to apply an individualized approach in which health professionals clarify patient's preferences.

Discussion: This systematic review found that older patients and their informal caregivers with MCC need explicit invitation to participate in SDM. Their personal experience of living with MCC is valuable input to the process of SDM. However, patients suffering acute events are often not able to participate in SDM. Informal caregivers should be respected as full partners in the SDM process. Health professionals need organizational support and good communication skills to work out an individualized approach and attention for the coordination of care when multiple health professionals are involved.


## 233
## The Impact of a values-based Goals of Management (GoM) form on patient centred communication and decision-making: An Observational Cohort study.

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Background: Patient-centred care has been shown to improve outcomes for patients, carers and institutions. The "iValidate" program was developed in recognition of current needs in patient centred care, particularly in relation to life-limiting illness (LLI). As part of this clinical program, a GoM form was developed in order to explicitly document shared decision making (SDM) based on patient values and preferences. Our goal was to assess the impact of the introduction of this form, prior to the commencement of SDM communication training.

Methods: This was an observational cohort study in a tertiary teaching hospital in Australia. The population was adult patients with LLI referred to a general medical ward. They were recruited over 2, 2 month periods, either side of the Hospital wide introduction of the GoM form. Data were collected including demographics, mortality, LLI and GoM.

Findings: 220 patients with LLI were recruited: 116 patients prior to form introduction and 104 patients after. This was a high risk cohort, with a 90 day readmission rate of 33% and 90 day mortality of 20%. The following changes were observed following the implementation of GoM form: A significant reduction in the number of patients choosing ICU/HDU as a treatment goal (77.6 to 45.2% p<0.0001); a trend towards increase in documentation of goals and values (4.3% to 13.5%). There was an observed reduction in MET calls (46.6% to 36.5%) without a reduction in ICU admissions (4.3% to 3.8%) or 90 day mortality (34% to 33%). Less than 25% of the new forms contained any documentation of patient centred discussions.

Discussion: Implementation of this novel patient centred GoM form was associated with a higher incidence of patient preferences towards more conservative care. This finding is consistent with prior SDM literature. SDM decisions were not documented on a majority of forms. These findings suggest more comprehensive initiatives, including patient-centred communication training, are important in order to change institutional culture.


## 234
## The readiness for shared decision making in kidney transplantation

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Background and research questions: This study aims to assess whether the implementation of shared decision making (SDM) is desirable and achievable in the context of kidney-transplantation.

The research questions were the following: What are the views and attitudes of kidney-patients and healthcare professionals on SDM? Under which circumstances can SDM be an advantage or a disadvantage? What is the best way to implement the process of SDM? Which information is necessary for the patient to be able to engage in SDM?

Methods: Semi-structured interviews and group discussions were carried out with respectively 42 patients and 19 healthcare professionals of the nephrology service of one of the largest university hospitals in Belgium. Data were thematically analyzed.

Results: Patients and healthcare professionals are mainly positive with respect to SDM. According to the patients, SDM might lead to: a higher level of mental wellbeing, quality of life tailored to the preferences and needs of the patient and to the opportunity to address several options. It is considered a significant benefit to the community. Healthcare providers add to these views the growing need of patients to be adequately informed but also their own need to communicate more transparently and to take the preferences of individual patients into account. Challenges both according to the patients and the healthcare professionals are the mental load it might cause to the patients, the paternalistic mindset of both patients and healthcare professionals, the gap between the interest of the individual patient and the general interest, the instability of patient preferences over time and the lack of time to engage in SDM conversations. According to the participants, SDM should consist of a face-to-face conversation with the doctor, prepared by a specialized nurse. In this conversation, all treatment options with their risks and benefits should be discussed. Healthcare professionals suggest the introduction of several contact moments with the patient in which there is time to thoroughly consider the option and to re-evaluate patient preferences. This process can be facilitated by the use of decision aids.

Discussion: The insights and suggestions based on this study might take nephrology services a step closer to implement SDM in clinical practice.

**235**
**Goal-setting in primary care for people with multimorbidity: challenges from the GoalPlan study**

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Background: The rise in multimorbidity and polypharmacy has led to international calls for health care systems to **become more focussed on patients' goals, values and priorit**ies. However, goal-setting is rarely used in primary care consultations.

Research question: What are the communication challenges for doctors and patients in using goal-setting in primary care consultations for patients with multimorbidity and at high risk of hospital admission?

Methods: The design was a cluster randomised controlled mixed-methods feasibility trial with video recorded consultations. This abstract describes the embedded qualitative analysis of the goal-setting intervention consultations. The intervention involved experiential family doctor training with goal-setting role-play, then goal-setting consultations with follow-up at 6 months.

Three family practices with 5 family doctors were in the intervention group, with 22 video recorded goal setting consultations in 10 men and 12 women.

A conversation analytic informed approach was adopted to identify patterns of interaction, how goal-setting was attempted, and communication challenges. Focus groups were held with participating patients and doctors.

Findings: The mean age of the patients was 81 years (55 to 93), mean number of medications 11 (range 6 to 22), mean number of comorbidities 5 (range 2 to 9) and mean consultation time 23 minutes (range 11 to 31). 54 goals were set: 22 medical (e.g. knee injection), 15 non-medical (e.g. gardening), and 17 other (e.g. end of life preparations).

Three main themes were identified from the qualitative analysis: patient preparedness and buy-in, supporting patients' priorities and eliciting goals, and collaboratively agreeing measurable goals and actions. Short clips from video recorded consultations will be presented around these themes.

The doctors focus group highlighted the more holistic approach with comments including: 'you can really do some nice medicine … ' and 'it's about recognising the therapeutic power of the consultation'.

Discussion:  Patients and their doctors were able to discuss, set and attain goals. Goal-setting consultations worked better when patients and doctors were prepared for a shared decision-making approach to the consultation, and the patient had ownership of the goals and actions. Further research is needed into the effects of goal-setting on outcomes.

## 236
## Telephone Communication - Understanding the problem

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Background:  Telephone communication between doctors is essential, especially in the acute setting. Root cause analyses of several serious incidents identified poor telephone communication as an issue. The aim of this study was to assess the perception of telephone communication from the perspective of the more junior 'caller' and the more senior 'call recipient' to establish the barriers to effective communication.

Methods:  Doctors of all grades were asked to participate in a questionnaire. Two surveys were conducted: the first for the 'caller' (Foundation doctor grade to Specialist trainee; n = 26) and the second for the 'call recipient' (Core trainee grade to Consultant; n = 20).

Findings:  8% of callers felt that they 'always' had enough time to prepare before making a call (77% mostly, 15% sometimes). 5% of call recipients felt that there was 'always' sufficient information to give appropriate advice (60% mostly, 30% sometimes, 5% rarely).

54% of callers rarely (50%) or never (4%) felt confident to challenge a senior about their plan. However, only 12% 'sometimes' felt belittled (69% rarely, 19% never) and 31% 'sometimes' found making a call intimidating (58% rarely, 12% never). 58% had 'never' been bullied (rarely 35%, sometimes 8%).

No call recipients felt that documentation of a call was 'always' accurate (20% mostly, 45% sometimes, 25% rarely, 10% never).

73% of callers and 90% of call recipients agreed that telephone communication could be improved.

Discussion:  Issues related to preparation, caller anxiety and documentation were identified. There was a strong consensus that telephone communication could be improved. We believe that standardising and structuring telephone communication could have a huge impact in improving patient safety. This could be achieved by devising a checklist (similar in style to the WHO theatre checklist). We have therefore implemented a checklist which has been adopted by the trust Quality Improvement Team and is a key priority for the Patient safety Improvement Board to be introduced as the standard means of telephone communication between all doctors throughout our organisation.

## 237
## The Residents' Perspective of the Challenges towards use of SDL in ACGME-I pediatric residency Program,Qatar

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Background: Self-assessment, self-directed learning(SDL)is one of the cornerstone for the new aura of teaching and learning . it had been Considered as one way to support transition from undergraduate to postgraduate Learning. using the skills of self-directed learning (SDL) by the residents in their training will improve their own professional development; challenges toward implanting (SDL) in the training program will create gap between residents and efficient training ,thus better understanding of those challenges will ensure earlier intervention by the program faculties and directors.our aim was to identify barriers to use SDL among pediatrics residents ,To explore potential recommendations that can overcome challenges and To explore ideas to ward effective creation of individual learning plan (ILP) and life long learning among residents.

Methods: Cross-sectional Survey included details of demographics and barriers to Self-Directed Leering use in clinical practice conducted from July -November 2016 among pediatrics residents at Hamad Medical Corporation main tertiary teaching hospital in Qatar. Questions offered objective answers utilizing 3-point Likert scale Finding:

Out of 50 respondents,(31) juniors and (19) Seniors. Nearly (90%) perceived lifelong learning as necessary to physician's carrier. Major barrier identified were; Lack of balance between social life and clinical workload (20%), Insufficient understanding of how to construct an effective Individual learning plan (18%), Lack of time to create plan for (ILP) and to apply it (17%),Lack of monitoring (qualified teacher/ adviser) in (ILP (16%), maintaining residency training requirements (16%), Lack of support from residency program (13%) Discussion and conclusion:

Nearly all the residents in this study placed a high value on SDL and perceive it as beneficial for promote education and academic advancement. Our study shed light on the barriers limiting use of SDL in ACGMEI program .several barriers related to their learning level, program level and external environments. home message:

several barriers had been identified by residents in our residency program ;allow residents to have protected time and resource for teach SDL, implement Hands-on workshop in their curriculum, use frameworks support ongoing learning; regular meet with mentors to discuss ILPs and evaluate process can overcome these obstacles.

**238**
**The input of psychosocial information in multidisciplinary team meetings at medical oncology departments: findings of an observational study.**

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Multidisciplinary team meetings (MDTMs) have become standard practice in oncology. They aim at collaborative decision-making about patient management ensuring evidence based treatment decisions. Literature suggests that treatment planning should be patient centered and should also take account of patients' and families' views and preferences. Therefore, it is crucial that medical as well as psychosocial information is presented and considered during MDTMs. Failure to account for patients' psychosocial information may have a negative impact on the implementation of treatment decisions formulated within an MDTM. In-depth insight in the underlying reasons why MDTMs fail to take into account psychosocial information is needed to enhance the effectiveness of MDTMs considering that they consume considerable time, effort and financial resources.

This contribution presents an observational study at medical oncology departments in Flanders (Belgium) focussing on the personal, professional, organisational and system related barriers to consider psychosocial information during a formally regulated and financed type of MDTM in Belgian oncology: the "multidisciplinary oncology consultation" (MOC). Data are collected through observations of MOC-meetings and semi-structured individual interviews with members of the MOC from different disciplines.

Consistent with findings in international research, the MOCs are characterised by a strong medical dominance in terms of attendance and contributions to the decision making process. The treatment decisions are mainly based on biomedical information with far less consideration of psychosocial aspects. A lack of (dedicated and formally assigned) time is the most reported barrier of the nursing and paramedical professions, which has negative influence on the consideration of psychosocial information. Hierarchical relations and cultural differences between the professionals also may influence the decision-making processes.

This study highlights the importance of effective multidisciplinary communication during MDTMs to avoid both the marginalization of team members and "poor" decision-making. This research also suggests that MDTMs could benefit from supporting tools and interventions to guide and structure multidisciplinary communication and team reflexivity.

**239**
**Choosing mediums, manipulating messages: relationships and physician-nurse communication practices**

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Despite the importance of physician-nurse communication to patient care in hospital settings, we know relatively little about communication patterns on general medical-surgical units, where the majority of inpatient care occurs. As communication technologies in healthcare have been changing how clinicians communicate, it is important to understand how and why certain mediums are used to communicate. Based on qualitative research at four U.S. hospitals throughout 2017, this study aims to characterize communication practices between physicians and nurses within inpatient care settings. Research sites included two community hospitals, an academic medical center, and an academically-affiliated Department of Veterans Affairs hospital. Researchers spent two weeks in medical-surgical units at each hospital, conducting observation, one-on-one shadowing, semi-structured interviews, and focus groups with nurses and physicians. Our analysis consisted of listening to and reading each transcribed interview, from which we created summaries of key points related to central themes. We then thematically coded and analyzed the entire data set, including fieldnotes.

By examining nurses' and physicians' decisions around choosing particular communication mediums, we found that in addition to the availability and reliability of technological devices, relationship factors shaped the ways in which nurses and physicians communicated. Based on previous communication exchanges and relationships with physicians, nurses would change communication practices and manipulate messages to get desired outcomes. For instance, they might send partial information to a physician in a text page to guarantee a call back, or they might wait to bring forward an issue until rounds, shift change, or in front of a team. Some nurses used communication technologies (e.g. text paging) with physicians they considered particularly unpleasant, to avoid face-to-face communication. Furthermore, nurses adapted their interpersonal style of delivery and the message content based on physicians' personalities (such as making suggestions rather than directly asking). These findings illustrate how nurses choose mediums not only based on the message they are trying to convey, but also on the recipient, highlighting how communication practices are influenced by the history and quality of relationships. Improving the quality of physician-nurse relationships in inpatient hospital settings could lead to more effective team communication, ultimately improving patient care.

**240**
**Healthcare Queeries: Exploring Interdisciplinary Approaches to Providing Quality Healthcare for LGBTQ Patients**

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Background: Interprofessional education and collaborative efforts among healthcare professionals increases knowledge, confidence, and outcomes for both practitioners and patients. Appropriate and respectful communication is especially significant in caring for LGBTQ identifying patients as it improves health outcomes. This is evidenced in the fields of nursing, medicine, physical therapy, social work, and mental health. With the goal of improving interactions with LGBTQ patients, an interprofessional educational seminar was developed and provided to graduate students from interdisciplinary fields.

Methods: A student-led seminar was conducted with medical, physical therapy, and counseling psychology doctoral students. The seminar included an introductory presentation, Interprofessional

Pictionary to discuss our overlapping roles in healthcare, and small-group discussions using four cases from the AAMC's document on Gender and Sexual Minority healthcare. We used pre- and post-surveys to assess the impact of our seminar on students' knowledge of issues affecting LGBTQ populations and perceived competency in providing quality care as well as their interprofessional education competence.

Findings: Using an independent t-test, we analyzed the data from pre- and post- surveys, which demonstrated statistically significance increases in three questions relating to treating LGBTQ identified individuals, one question relating to LGBT healthcare, and eight questions relating to interprofessional education competency. These included increases including, but not limited to feeling more comfortable addressing the healthcare needs of LGBT identified individuals, choosing communication tools and techniques that facilitate effective team interactions, and informing care decisions by integrating the knowledge and experience of other professions appropriate to the clinical situation.

Implications: While our sample size was small, students who participated reported significant improvements in one domain of LGBTQ healthcare competency and three domains of interprofessional education. Our hope is with a mandatory seminar, we can positively affect those who are not as well-versed on either subject and increase interprofessional opportunities for better patient outcomes.

## 242

### Physicians' work engagement and patient engagement: flip sides of the same coin? A cross-sectional study on Italian medical doctors

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Background Physicians' work engagement is increasingly acknowledged as crucial asset for optimal patient care. Unless the link between physicians' engagement and their disposition to effectively engage patient is a shared feeling, no investigators have explored whether this link is empirically confirmed. Recent studies argued patient engagement is co-constructed within patient-doctor relationships and depends not only on patients' characteristics, but also on physicians' psychological attitudes towards their work. This study aimed at deepening the relationship between physicians' work engagement and their attitude and behaviours related to the promotion of patient engagement.

Methods The online survey, on 278 Italian medical doctors (98 gastroenterologists and 1809 reumatologists), included a set of validated measure to respectively assess physician's work engagement (UWES - Schaufeli, 2002), patient engagement attitudes (CS-PAM - Hibbard et al., 2010), patient engagement supportive behaviours (SMS – Greene et al., 2017), physicians' orientation to the patient role (PPOS – Krupat et al., 1999). We examined the bivariate relationships between physician work engagement and the dependent measures. Next we developed multivariate regression models for each dependent variable with physician work engagement as the key independent variable, controlling for potential confounding variables.

Findings Regression analysis revealed physician work engagement as significantly associated with their attitudes and behaviours towards patient engagement. Particularly, more engaged physicians were more open to see patients as active player in the medical course and more likely to enact patient engagement behaviours.

Discussion These findings highlight the potential role that physician work engagement can play in improving quality and safety of patients' care. As health systems and providers currently endorse patient engagement as a crucial element for effective care, it will be important to identify effective ways to support physician work engagement to achieve the humanistic relationships that are key elements for making patient active partners with clinicians in managing their care.

## 243
### Understanding information needs and gaps faced by parents of children with genetic disorders at the time of diagnosis

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Introduction: Literature on information needs of parents of children with genetic conditions is limited. We sought to determine the experiences of parents of children with genetic conditions in Poland related to the delivery of diagnosis and, in particular, to identify their information needs as well as perceived gaps in this area.

Method: A self-constructed questionnaire was completed by willing parents and caregivers, contacted trough patient associations.

Results: A total of 250 parents responded. 65% of respondents were not satisfied with the information they received at the time of diagnosis. Majority of parents received detailed information on the genetic details of the condition their child was diagnosed with. Where there was a pharmacological therapy available within the national healthcare system the parents were also informed about such therapeutic option. However, 40% declared no information on „what to do next" was provided. Other crucial gaps were related to reproductive counselling and referral to disability related social and educational services, which was uniformly lacking.

Conclusions: Parents of children diagnosed with genetic diseases expressed primarily the need for information related to everyday care and sources of support within and outside the medical realm. While medical details on a specific disease is conveyed, what is often missing is information that would facilitate the path of patients within the healthcare system as well as social security and educational sectors.


## 244
## Information Matters: Adult Children's Attitudes Toward End-of-Life Discussions With Parents in Japan

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Background. In Japan, the government guideline for end-of-life care presumes that family members should serve as surrogate decision-makers for older adults. Among family members, adult children are particularly likely to be called upon to determine the course of end-of-life care for aging parents. Focusing on Japanese adult children caring for aging parents, our aim in this study was to explore whether and how these children's attitudes toward end-of-life discussions with their care-receiving parents might change by participating in an educational program that offered information on how to become prepared for parental end-of-life care.

Methods. Sixty adult children participated in our educational program that was comprised of a 40-minute lecture plus 1-hour workshop. Through this program, participants learned the process of physical and cognitive decline that older adults would likely experience at the end of life, what physicians would typically expect of family members when patients were at the end of life, and tips to initiate discussions with aging parents about their preferences regarding end-of-life care. We assessed participants' attitudes toward end-of-life discussions using 3 items that asked them how much they agreed to the statements "I don't know what to discuss with my parent(s) to become prepared for parental end-of-life care," "it's important to discuss with my parent(s) about end-of-life issues," "I am reluctant to discuss end-of-life issues with my parent," respectively (1 = strongly disagree to 4 = strongly agree). We also measured how much participants anticipated assuming the role of surrogate decision-maker as a possible influence on pre- and post-program differences in attitudinal scores.

Findings. Scores on the item I don't know what to discuss became significantly lower after the program. At the same time, there was also a decline in scores on the item it's important to discuss end-of-life issues with parents among those who did not anticipate assuming the role of parental surrogate decision-maker.

Discussion. Results suggest that offering information on how to become prepared for parental end-of-life care can lead adult child caregivers to discuss relevant issues with their parents although such influences may depend on whether they anticipate assuming the role of surrogate decision-maker.


## 245
## Orthopeadic patients' experiences of the usefulness of education material

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Background: Patient education is an essential part of nursing. To ensure high quality education material, we need optimal material for empowering patient education. The purpose of this study was to describe the patients' experiences on the usefulness of patient education materials and development ideas for improving the usefulness of the material. The objective of the study was to raise the patients' perspective on the usefulness of the education material and to provide information for the nursing personnel for development of the usefulness of the education material.

Methods: The study was carried out using a descriptive study design with theme interviews. The population of the study was orthopaedic surgery patients in one Finnish university hospital. The sample was constructed using a purposive sampling method. The final sample size of the study consisted of 14 adult patients. The data was analyzed with inductive content analysis.

Findings: Orthopaedic surgery patients used education material as self-care support. The education material was usefulness when it responded to patients' knowledge needs individually, was understandable and supported patients' sense of control. The usefulness of education material was prevented or contributed by the individual factors of the patient, quality of the education material and the equivalence to other education.

Discussion: The results suggest that the usefulness of the education material can be developed by observing the individuality of the education material. The usefulness of the education material can be improved by paying attention to the equivalence of face-to-face education and education materials. The study results can be utilized in nursing practice for development of education materials and its effective implementation and especially for the support of orthopedic surgery patients' empowerment and self-care.


**246**
**Impact of a pre-visit intervention on teen question-asking and doctor education during asthma visits**

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**Scott Davis, UNC Eshelman School of Pharmacy**
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**Dan Reuland, UNC-School of Medicine**
**Gail Tudor, Husson University**

Objective: We conducted a pragmatic randomized controlled trial to test the effectiveness of an asthma question prompt list with video intervention to increase youth question-asking and provider education during visits.

Methods: English or Spanish-speaking youth ages 11-17 with persistent asthma and their parents were enrolled from four rural and suburban paediatric clinics. Youth were randomized to the intervention or usual care groups. Intervention group adolescents watched the video on an iPad and then completed an asthma question prompt list before their visits. Generalized estimating equations were used to analyze the data.

Results: Forty providers and 359 patients participated. Intervention group youth were significantly more likely to ask one or more questions about asthma medications, triggers, and environmental control than usual care youth. Providers were significantly more likely to educate intervention group youth about rescue medications, triggers, and environmental control. Intervention group caregivers were not significantly more likely to ask questions.

Conclusion: The intervention increased youth question-asking and provider education about asthma medications, triggers, and environmental control. The intervention did not impact caregiver question-asking.


**247**
**Exploring rural caregivers' challenges and their interest in technology-based interventions when caring for adolescents with mental health issues: using the Mmogo-method®**

**Ronelle Jansen, University Of The Free State**
**Marianne Reid, University Of The Free State**

Background: Caregivers serve as gatekeepers for adolescents with mental health issues. Caregivers' own challenges are often not met. Technology-based interventions can be tailored to address these challenges, especially in a rural environment. The aim of this study was to explore caregivers of adolescents' challenges and their interest to use technology-based interventions.

Method: The researcher conducted a visual-based narrative inquiry and gathered data through the Mmogo-method®. This method involves the creation of individual visual presentations of participants' lived experiences followed by group discussions. Three (n=3) group were held with rural caregivers (n=17) of adolescents with mental health issues in the Free State province of South Africa during 2017. A thematic analysis of textual data, using audio recordings, was done. Visual presentations were analyzed through a stepwise literature-based process.

Findings: Three overarching themes captured their challenges, namely: psychosocial, social resources and informational. These themes were divided in subthemes. Caregivers concurred that technology-based interventions could assist them when caring for adolescents with mental health issues. They preferred the use of SMS, phone calls and to access information via a computer to support them as caregivers.

Discussion: Technology-based interventions can provide support to caregivers in rural areas, which are resource-constraint. This study created an opportunity to hear the neglected "voice" of these rural caregivers. Technology-based interventions can reduce the burden on health care systems in resource constraint environments. Research in this context generated the potential to assist caregivers and set the table for further research.

## 248
## Negative support experienced by Japanese mothers with special needs in gynecology hospitals

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**Yoshihiko Yamazaki, Fukushi University**

Background: Pregnancy and childbirth are important events for women, and they may change their life completely. However, these events do not always provide positive experiences for women. Sometimes, a baby dies, or is born with a disability. Communication with women who experienced problems in childbirth need to be sensitive, though sometimes, the words and deeds of healthcare professionals hurt these women's feelings. In short, when such women perceive communication with healthcare professionals as inadequate, or support from healthcare professionals as inappropriate, these become "negative support." Thus, it is important for healthcare professionals to reduce or prevent the occurrence of negative support. This study aimed to describe the experiences related to negative support among Japanese mothers with special needs in obstetrics and gynecology hospitals.

Methods: Previously, we have conducted two qualitative studies that focused on 1) mothers of children with disabilities (n=15) and 2) mothers who lost a baby by medical malpractice (n=8). Using secondary data of these two qualitative studies, the codes and descriptions related to negative supports were extracted. Gathering these data, similar codes and descriptions have been clustered, and codes, subcategories, and categories were recreated.

Findings: The extracted main categories are "Unnecessary encouragement," "Not provided information to related risks," "Unnecessary consideration," and "Lack of opportunities to be heard."

For example, a mother who experienced stillbirth said, "The doctor told me that you were lucky because you were still alive, and the (dead) baby helped you. So, I thought, I killed my baby...it was all my fault." This was "Unnecessary encouragement" from the doctor, but a nurse also provided similar encouragement such as "You are OK, you can begin again." The mother who heard this reported that "begin again" was shocking because she just lost a baby.

Discussion: We will present the experiences related to negative support among mothers with special needs in obstetrics and gynecology hospitals, including characteristics of Japanese cultural aspects. Hearing these mothers' stories may contribute to understand what type of communication or support has the risk to turn into negative support and prevent a good relationship between healthcare professionals and patients.

## 249
## Psychosocial support for men suffering from a rare disease – do male breast cancer patients get enough information?

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**Sarah Halbach, CHSR Uniklinik Bonn**

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Background: Male breast cancer can be regarded as an example for rare diseases, as just around 1% of breast cancer patients are male. Coping with a rare disease could raise insecurities and could lead to mental health disorders, which are very common comorbidities in female breast cancer patients (FBCP). And even though structures have been established to provide psychosocial care, FBCP still show psychosocial support needs. Yet it is unclear whether male breast cancer patients (MBCP) receive sufficient information about psychosocial support, to ensure that they are enabled to find adequate psychosocial treatment offers. The aim of this study is to examine unmet information needs regarding psychosocial support in MBCP and to analyze individual determinants of unmet information needs with special emphasis on health literacy.

Method: The N-MALE study (`Male breast cancer: Patients' needs in prevention, diagnosis, treatment, rehabilitation, and follow-up care´) conducted in Germany from 2016 to 2018 investigated male breast cancer patients' experiences and their medical and psychosocial needs during their treatment. Patients were recruited in hospitals and self-help groups. Information was gathered by a written questionnaire, which included socio-demographical and disease related information, health literacy and unmet information needs. The data is analyzed with descriptive methods and regression models.

Results: Data of N=100 MPCP were analyzed. MBCPs' mean age was 67 years and mean of the diagnosis year was 2013. 10% showed an inadequate health literacy and 25% a problematic health literacy. 10% wished for more information on psychosocial support. Findings of the regression model implicate that patients with an inadequate health literacy are significantly more likely to show a higher need for information about psychosocial support (OR=23,217).

Conclusion: Results show, that patients with inadequate health literacy are in need for more information about psychosocial support. Information should be provided especially for aftercare like psychosocial treatment. There are a lot of barriers for finding and receiving psychosocial support. Especially those patients who face difficulties in assessing health information need a tailored information, which enables them to find support and cope with their disease.


**250**
**The families' verbalizing of gratitude and apology to patients at end of life – a questionnaire survey with bereaved family members**

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**Tomoko Wakui, Tokyo Metropolitan Institute of Gerontology**
**Hiroko kodama, Aomori University of Health and Welfare**

Background: Feelings of gratitude, apology, and so on that are communicated between patients and their families at end of life are thought to lead not only to the patients' QOL, but also to the family's acceptance of the patient's death and peace of mind following the loss. This study examined the factors associated with families' verbalization of feelings of gratitude and apology to patients at end of life.

Method: Questionnaires were administered to 753 people from bereaved families (users of a home visiting nursing service whose family members died in the previous 6–18 months) covering (1) families' verbalization of feelings of gratitude or apology to patients, (2) medical staff support for families to convey feelings to patients, (3) patient attributes (age, sex, presence of cancer and dementia, nursing care level, place of death), (4) attributes of the bereaved family (age, sex), and (5) other factors (relationship, intimacy with the patient, time since patient's death). A binary logistic regression analysis was carried out with questionnaire item (1) as the dependent variable, and questionnaire items (2) – (5) as the independent variables. This study was approved by the Tokyo Metropolitan Institute of Gerontology Ethics Committee.

Findings: A total of 349 responses were collected. There were 307 people from bereaved families of patients aged 65 years and above who died at home or at the hospital, and the responses of 272 people that had no incomplete variables for analysis were analyzed. In respect to "verbalization of feelings," a strong correlation was found in the case of female members of bereaved families (OR = 3.36) and in the case of medical staff support for families to convey feelings to patients (OR = 4.60). A correlation was not observed in the case of the other variables (probability of significance at the level of 5%).

Discussion: This study clarified the factors associated with families verbalizing feelings of gratitude and apology to patients at end of life. Findings indicate that medical staff giving support in conveying feelings from the family to the patient, and taking into account the gender of the family, is beneficial in family care.

## 251
## Midwifes' gendered orchestration of parent-child interaction in the first minutes of life

**Shirley Näslund, Linnaeus University**

Background: When a child has been born in a maternity ward, the midwife has three interrelated social tasks to perform: a) to draw the parents' attention to the child b) to stimulate the interaction between parents and child, and c) to promote the development of parental identities. The aim of this study was to investigate how the midwifes performed these bonding tasks.

Method: Conversation analysis was used to analyse 79 video-recordings of the first 15 minutes of life (6 research recordings and 73 documentary recordings) for verbal and embodied aspects of midwifes' orchestration of parent-child interaction.

Findings: The analysis showed recurrent patterns in the midwives' interaction. The midwives used the following means to promote parental bonding: a) They drew the parents' attention to the child by delegating the sex assignment to them, even when the parents knew the sex in advance, b) They stimulated the interaction between parents and child by animating the child's voice, and the animation was in nine of ten cases Hi mum!, even when the father was close by, c) The parental identity mother was talked into being by the midwifes when the child was put on her chest, whereas the identity father was talked into being later when he was asked to cut the umbilical cord.

Discussion: This study gives insight into an understudied area and makes midwives aware of the problems that can arise when their bonding agenda collides with gender issues. It opens for considering other ways to draw the parents' attention to the child than sex assignment, or as a father responses to a midwife: It is a human!. Furthermore, it opens for considering to verbalize the parental identity father at an earlier stage, and questions the recurrent division of verbalizing mother at a particular point and father at another.

## 252
## Parent/Doctor communication and "The Art of War"

**Andrew Thompson, Auckland District Health Board**

Background: Overarching question

How do doctors and parents work together and relate together when a child has a complex or undiagnosed neurological condition?

Aim: To identify the preparatory, structural, predisposing and interactional factors that may enhance the parent and doctor relationship and improve outcomes for children with a complex or undiagnosed neurological condition.

Goals of the research: Identify the preparatory factors that emerge from the research that may enhance the knowledge gathering and efficacy of the parent and doctor working relationship

Determine structural factors that empower or hinder the parent and doctor relationship

Demonstrate how predisposing and interactional factors promote or inhibit shared decision making within the parent and doctor relationship

Methods: I video recorded 12 medical consultations and followed up each with an interview of the parent, and of the doctor involved. Interviews were semi-structured based on participants reflecting on the transcript and from the themes and questions emerging from the medical consult. Medical consults and interviews were transcribed and coded using IPA procedures (Smith, Flowers and Larkin, 2009). Narratives were prepared summarising the key themes emerging from each interview and returned for checking to the participants. A random selection of transcripts and narratives were also checked by independent coders.

Findings:

- Demonstrated the vulnerability of doctors and parents engaged in the care of fragile children.

- **Parents are becoming increasingly active in their child's care, but trust the doctor more than the internet.**

- Parents routinely recorded detailed observations of their child

- Parents join international social media networks to support their child

Discussion: The role of parents is evolving in the doctor and parent relationship. Parents are increasingly able to **influence and improve their child's outcomes. Adopting smart technology** to enable effective observations will continue to shift parents from passive recipients to active participants. The role of social media and parents' right to consult international medical "experts" requires an international agreement or code of conduct.

## 253
## To Lose an Unborn Child:PTSD, Depression and Relationship Quality following Pregnancy Loss

### Malka Nukrian, Hadassah Medical Center

To Lose an Unborn Child:PTSD, Depression and Relationship Quality following Pregnancy LossThe loss of an unborn baby/fetus is recognized as a very difficult life experience, which is often followed by negative psychological implications. This seems to be particularly true when the loss occurs at relatively late stages of pregnancy, as expectations of parenthood develop, and as the parent-child emotional bond becomes stronger

Methods: Between July 2014 - July 2015, preliminary data was collected in Jerusalem, Israel. Participants were 99 women, ages 24-49 (M=35.07, SD=5.28). They were recruited from two sources: 1. Women who have contacted the support groups operated at the Hospital. 2. Women who were treated for pregnancy loss at the Hospital

Discussion: Late pregnancy loss entails a heavy burden of PTSD and MDD. When fetal loss occurs at late stages of pregnancy, mothers must cope with shattered expectations regarding motherhood. In terms of PTSD, late pregnancy loss usually involves stillbirth, often following the medical termination of pregnancy that may involve physical pain, difficult sights and more. We have also found that measures of dyadic relationship predict resilience and vulnerability in the face of pregnancy loss, thus can be defined as dyadic trauma. Thus, the quality of the spousal relationship following pregnancy loss is an important factor, contributing **to the woman's ability to cope** and maintain psychological well-being.

Results: Overall, we have found a relatively heavy burden of both PTSD and MDD among women following late pregnancy loss. When applying a PCL-5 threshold score of 38, the rate of PTSD was 25%, 53% of the sample reported mild depressive symptoms or higher. In addition, 66.7% of those with severe MDD also endorsed a probable PTSD diagnosis, indicating high PTSD-MDD comorbidity.

## 254
## Challenges Optimizing the Outpatient After Visit Summary to Achieve Improved Clinician-Patient Communication

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**Erin Sarzynski, Department of Family Medicine, College of Human Medicine, Michigan State University**
**Cindy Brach, Agency for Healthcare Research and Quality**
**Paul Francaviglia, Icahn School Of Medicine At Mount Sinai**
**Jessica Jacques, Icahn School Of Medicine At Mount Sinai**
**Angela Sanchez, Icahn School Of Medicine At Mount Sinai**
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**Michael Wolf, Feinberg School of Medicine, Northwestern University**
**Joseph Kannry, Icahn School Of Medicine At Mount Sinai**

Background: The after visit summary (AVS) compiles key elements of the outpatient visit for patients. Clinicians can use it to reinforce, clarify, **and promote retention of information to support patient's health and self**-management. Unfortunately, the AVS produced from many electronic health record (EHR) platforms have design flaws that may limit their utility. For this reason, many health systems have attempted to improve the default AVS generated by

their EHR. The purpose of this paper is to describe the experiences of United States healthcare systems implementing redesigned AVS.

Methods: We conducted semi-structured interviews with information technology and clinical leaders at 12 hospital and community-based healthcare institutions across the continental U.S. focusing on the process of AVS redesign and implementation. We also report our experience implementing a redesigned, patient-centered, low-literacy compatible AVS in the Epic EHR at the Mount Sinai Hospital in New York City, NY.

Findings: Health systems experienced several challenges implementing the redesigned AVS. While IT leaders often noted that the redesigned AVS is easier to understand and better organized, they said the effort was time-consuming, system upgrades rendered AVS modifications non-functional, and primary care and specialty practices had different needs in regards to content and formatting. Our team achieved limited modifications of the AVS by changing order of print groups, modifying font size, bolding section headers, and inserting page breaks. However, the EHR architecture restricted the extent of modification, and many of the patient-centered changes we sought were impossible to achieve, such as exclusion of medical jargon and identifying the purpose of each medication.

Discussion: Health IT leaders view the AVS as a valuable means of sharing key information with patients. However, limited customizability of EHR systems prevents document optimization. EHR vendors should incorporate learning from healthcare systems' innovation efforts and consider building more flexibility into their products.

## 255
## EHR use and burnout in Portuguese health professionals – the protective effect of Happiness

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**Dilermando Sobral, Faculty of Medicine - University of Porto**

Background: The use of electronic health records (EHR) improve efficiency but may also challenge professional's ability to maintain a patient centered approach, leading to empathy disappearance and frustration. Difficulties imposed by the information system challenges the balance between its beneficial and negative impact in daily practice, and add to health professional's levels of stress and burnout. Portuguese family physicians reported recently high levels of emotional exhaustion, depersonalization and a lack of personal accomplishment. Conversely research has confirmed the protective role of wellbeing and professional satisfaction in the physician's ability to resist to adverse and unhealthy circumstances. We aim to gauge the use of EHR in different health professionals – patient interaction and its impact on burnout and happiness.

Methods: A group of family physicians and family nurse practitioners fulfilled an online questionnaire assessing burnout and subjective wellbeing through standardized instruments (Maslach Burnout Inventory - MBI and Subjective Happiness Scale - SHS). The use of EHR was evaluated through Professionals' Satisfaction Questionnaire with Electronic Medical Records (PSQ-EMR). Professional and sociodemographic characteristics were also surveyed.

Findings: One hundred forty-eight physicians and 66 nurses accepted to participate in the study. Professionals considered positively the EHR use regarding "Improved care" and "Content and accuracy" and lower in "Security and confidentiality". Emotional Exhaustion and Depersonalization MBI subscales revealed a negative correlation with PSQ-EMR; Personal Accomplishment presented a positive association with PSQ-EMR score. Participants presented high levels of Emotional Exhaustion and moderate levels of Depersonalization, but SHS presented above the midline for all professionals.

Discussion: A relationship between burnout and professional's satisfaction with the utilization of EHR was detected. We hypothesize that although unfriendly hardware, number of consultations and clinical context can contribute to burnout, personal well-being may serve as buffer in EHR handling. Evidence points to the possible erosion of empathy and patient centeredness occurring when digital resources are not fully integrated in patient-physician communication. Health professional's perspective can convey important information, useful to prevent the negative consequences of the disseminated use of EHR.

## 256
## Between "cuddle" and "nutrition": exploring the Social Media discourses about milk consumption in the perspective of the Italian mothers

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**Guendalina Graffigna, Università Cattolica Del Sacro Cuore**

Background:  More aware consumers use Social Media to make sense of the information about their everyday life (Bechmann & Lomborg, 2013), including the ones about food choices to engage in healthy conducts (Moorhead et al., 2013). Social Media are powerful tools offering an arena where to create and influence experiences and practices, leading in some cases to the "dark side" of communication: misinformation and fake news (Mou & Lin, 2014). Among all, free from lactose products are at the centre of the debate around healthy food (Pereira, 2014), particularly in the Italian context, where 25% of the population wrongly believe to be intolerant, contributing to the increase of this market (+3% from 2016 to 2017). In this framework, we proposed the Italian mothers as prototypical sample, considering their relevant role in the daily consumptions and in orienting the families' diet.

Methods:  The present study aims at exploring the representations of milk consumption by Italian mothers by identifying spontaneous narratives, recurring themes and sentiment associated in the discourses present on the main Social Media (i.e. Facebook, Twitter, blog) between 2011 and 2016. Insights from the Social Media analysis were corroborated with an analysis of the social representations and lived experiences with in---depth interviews on a sample of 15 Italian mothers.

Findings:  Italian mothers' social media debate around milk consumption brings to the surface a general disorientation. On a total of 963 posts analysed, 123 about cow milk (34% having negative sentiment), mostly referring to the impact on health. Moreover, the mothers position on two different representations of this food: "milk as a cuddle" and "milk as nutrition". The need for education appears clear, and the mothers express the expectation for more authoritative sources of information on this topic.

Discussion:  These results underline the role of Social Media communication in shaping milk representations and consumption patterns for the Italian mothers; it seems to be the opportunity to educate consumers about food choices impacting on health through Social Media. Furthermore, authoritative sources of information about milk consumption are required, if attuned with the mothers' expectations of participations and exchange on the topic.

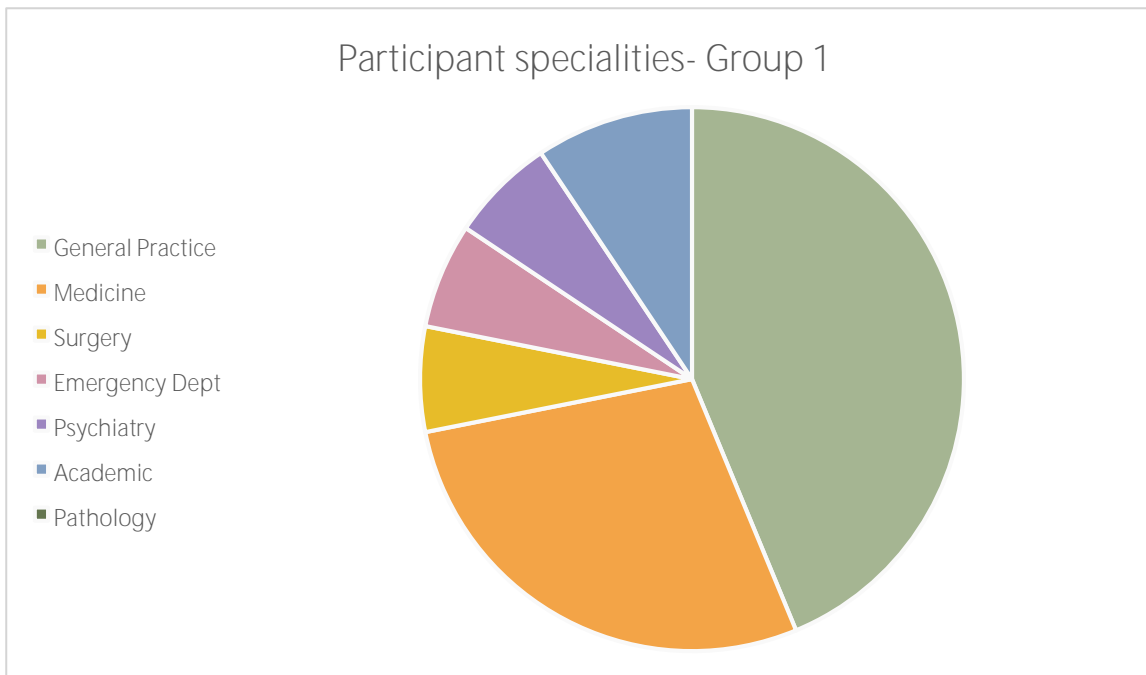**257**
**WhatsApp – a suitable format for a learning community of medical educators?**

**Emma Hayward, Leicester Medical School**
**Andy Ward, Leicester Medical School**

A learning community is "an intentionally created group… actively engaged in learning from each other". Clinical educators across many disciplines teach Leicester University students in geographically distant placements. WhatsApp has been evaluated as a means of communication between doctors and medical students and also within clinical teams.  This study sought to establish whether WhatsApp is an effective platform for developing a learning community of medical educators.

Method:  Clinical educators associated with Leicester University received an email invitation.  The first WhatsApp group (n=38) included teachers from diverse specialities and a wide geographical area.

Participant specialities- Group 1

- General Practice
- Medicine
- Surgery
- Emergency Dept
- Psychiatry
- Academic
- Pathology

Another group was established for tutors of a clinical communication course (n=23). An online survey evaluated the effectiveness of both groups. Ex-members were also asked for feedback.

Results: The groups were used in different ways. The first included updates of general interest but discussions were limited. The second generated more discussion between tutors and shared teaching resources.

**Graph One shows the percentage of participants (n=19) who agreed with the statement "Participating in the** WhatsApp group has been effective for:

- making me feel more connected to the medical school;

- sharing teaching experience;

- asking questions about teaching;

- keeping up to date with developments in medical education; and

- communicating more effectively with **medical school staff."**



Graph One
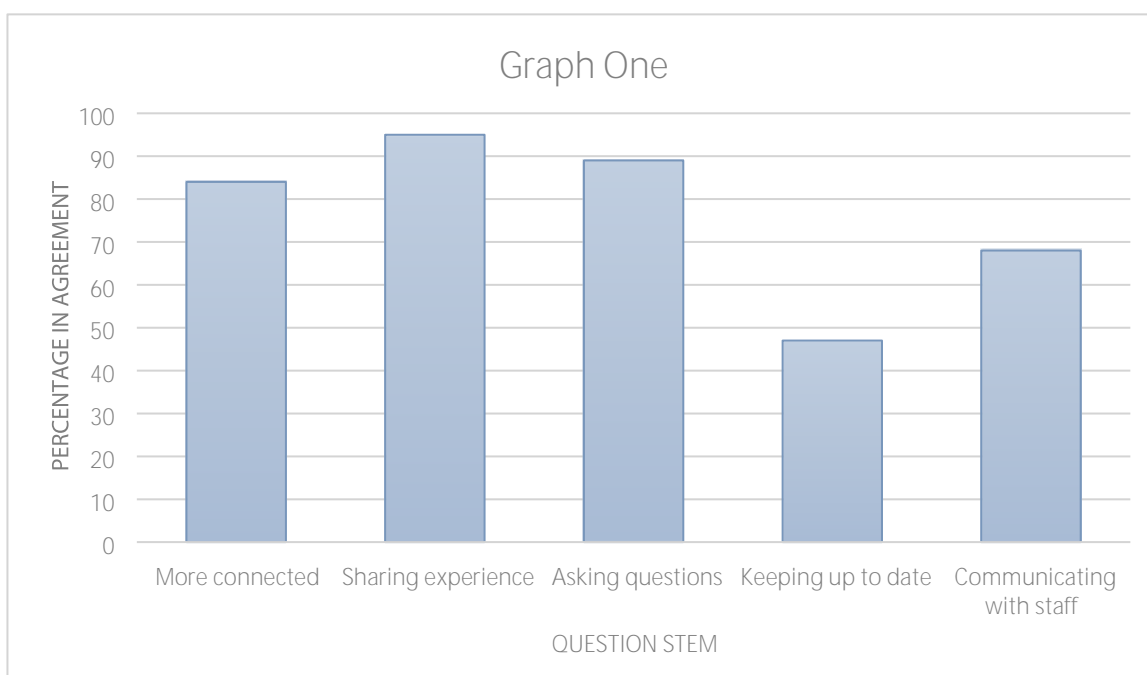
Discussion:  Participants found the WhatsApp groups helpful in many areas, except keeping up to date in medical education.  However, participants reported that it was harder to connect with people in the larger group.  Some participants left due to the frequency of interruptions if the group was in use.

Educators without a smart phone and those unwilling to use a personal number are excluded.

Implications:  Online interaction using WhatsApp may facilitate the development of a learning community of medical educators, especially those who have a common purpose.  Groups connecting clinical teachers with less in common may benefit from a "curator" to provide regular points for discussion.  Further research into online platforms for a learning communities in medical education would be helpful.


## 258
## Is app technology an appropriate communication tool for student learning?

**Karen McCutcheon, Queen's University Belfast**

Background:  The World Health Organisation amongst others recognises the need for the introduction of clinical supervision education in health professional education as a central strategy for improving patient safety and patient care. However, there is a lack of research on the optimal method of teaching this. The use of educational technology as a teaching method is growing exponentially in higher education and the systematic evaluation of this method will aid understanding of how best to teach and communicate the values of clinical supervision to nursing students.

Objective:  The aim of this study was to compare student learning with online only learning versus blended learning in terms of the educational impact on the knowledge, attitudes and motivation of undergraduate students in relation to clinical supervision; and their satisfaction with the learning modalities.

Design:  A post-test-only randomised controlled trial.

Setting and Participants:  A total of 125 pre-registration nurses enrolled at one United Kingdom university, randomly assigned into the online learning control group (n = 62) or the blended learning intervention group (n = 63).

Method:  The blended learning intervention group participated in a face-to-face tutorial and had access to a clinical supervisee skills training app. The control group participated in an online discussion forum and had access to a clinical supervisee skills training app. The outcome measurements were motivation and attitudes using the modified Manchester Clinical Supervision Scale, Knowledge using a 10 point Multiple Choice Questionnaire and satisfaction using a university training evaluation tool. Statistical analysis was performed using independent t-tests to compare the differences between the means of the control group and the intervention group.

Results:  The study results confirmed that participants who receive clinical supervisee skills training via a blended learning approach scored higher in terms of motivation and attitudes (p=.001) knowledge (p=.015) and satisfaction (p=.001).

Conclusion:  Blended learning has added pedagogical value when compared to online learning in terms of communicating and teaching nurses clinical supervisee skills. The results add to the evidence base for blended learning in higher education and will specifically assist in the future development of how to communicate and teach clinical supervision education.


## 259
## Social-Structural Factors Associated with eHealth Use among African American Male Cancer Survivors

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**Hayley Thompson, Karmanos Cancer Institute; Wayne State University School of Medicine**
**Ed-Dee Williams, The University Of Michigan**
**Kavitha Lobo, The University Of Michigan**

Background: eHealth is the use of Internet-based and mobile technologies to assess, monitor, communicate about and improve health. Among the 13.7 million cancer survivors in the U.S. today, little is known about how African American men utilize eHealth to manage cancer survivorship, despite their disproportionate cancer disparities burden. The purpose of this study is to determine the extent to which African American male cancer survivors engage in eHealth activity and the types of activities they utilize.

Methods: To date, this ongoing study includes a population-based sample of (N=325) African American and White breast, prostate, and colorectal cancer survivors in Southeast Michigan. The embedded mixed methods design utilizes primary quantitative survey and secondary qualitative prompts capturing participants' report of eHealth activity across six quantitative domains and 17 predictors. Domains include: Internet access and eHealth activity, socio-demographic status, clinical factors, healthcare resources, technology acceptance, and healthcare resources. The current study is a sub-sample of all (n=56) African American male cancer survivors drawn from the larger study. The ongoing analysis process includes systematically coding the interview transcripts using DeDoose 7.6.21 to reliably capture the content, type, function, and context of eHealth utilization and experiences. Analytic tools such as 3-D code clouds, interactive descriptor graphs, and code count tables will corroborate the research teams' interpretation of data patterns.

Findings: African American men were 60 years old on average, 85% of them had prostate cancer. We hypothesize that that these older African American male cancer survivors will most utilize eHealth for online information-seeking, but will be less to utilize the full range of eHealth activities such as emailing, video-chatting or otherwise communicating with health providers, tracking symptoms, appointments, and medications, managing medical records or communicating in online communities about survivorship needs. More detailed findings are forthcoming.

Discussion: Characterizing the eHealth activities of African American male cancer survivors will allow clinicians and researchers to identify the ways in which eHealth can supplement or replace existing practices and reveal opportunities for tailored interventions aimed at leveraging eHealth technology to optimize patient-provider communication and access to cancer survivorship resources and information.


## 261
## Developing an e-learning course for intervention group leaders though participatory design

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**Christoffer Hals, Frambu Resource Centre For Rare Disorders**
**Krister Fjermestad, Department of Psychology University of Oslo**

Background: Siblings of children with disabilities are at risk of psychological problems. SIBS is a group intervention targeting communication between siblings and their parents about disease related challenges. SIBS showed reduced psychological problems in a pilot study. The effects of SIBS will be further studied in a randomized controlled trial (RCT) from January 2019. To properly train the intervention providers at the sites of the RCT we intend to develop a training package comprising e-learning and practical workshops. The project proposed herein is focused on the development of this training package through participatory design.

Methods: The main aim of the project is to develop an e-learning course for health providers in municipal health services. The performance indicator follows 3 steps: 1) Developing the course (Jan-Jun 2018); 2) Launching and implementing the course (Jun-Dec 2018); and 3) At least 16 municipal health providers to have completed the course by Dec 2018. The course represents the first part of the training that will prepare health providers to conduct the intervention in the planned RCT. The main aim will be obtained through the following sub-aims: 1) Conducting five workshops to inform contents of the e-learning course. The workshops will be a collaboration between the municipalities, user organizations, Frambu, and the Department of Psychology; 2) Developing animations and video illustrations for the e-learning course; and 3) Implement the e-learning course through an established web-platform (www.sjelden.no).

Results: The EACH presentation will focus on the participatory design process; the back and forth process between the project group, the workshops and the creation of e-learning modules with animations and videos. We further plan to present the resulting e-learning program and preliminary results of user evaluations.

Discussion: The potential benefits and challenges with involving a large user groups in designing training will be outlined, including implantation recommendations for future projects. The SIBS group intervention can potentially improve health communication between siblings and their parents about disease related challenges. An e-learning course will be an effective, flexible and practical way to prepare and educate health providers to conduct the intervention in Norwegian municipalities.

**262**

**Digital technology has potential as a communication tool in the prevention of obesity among children**

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**Raymond Bond, School of Computing, Ulster University**
**Jane Zheng, School of Computing, Ulster University**

Background: Overweight and obesity are increasing among children and are a risk factor for many chronic conditions such as diabetes. For children, their parents and families have an influence on their dietary intakes and physical activities. With the increase use of digital technology such as mobile devices and applications, it is currently unknown the how the use of digital technologies for communicating dietary and physical activity information among children, in the prevention of obesity. The aim of this study was to investigate the use of digital technologies in the communication of dietary and physical activity information for the prevention of obesity among children, from the parents' perspectives.

Methods: The research design was a quantitative online survey. This survey was distributed to parents of children aged 5-11 years to gain information on the use of digital technology in communicating dietary and physical activity information to children, in the prevention of obesity, from the parents' perspectives. The parents were recruited via participating Schools, which represent a range of socio-economic backgrounds. Data were analyzed using SPSS (version 24) and predictive modelling conducted. Ethical approval was obtained.

Findings: In total over 2000 parents completed the online survey. Data analysis on the full dataset is in progress. The findings indicated that parents stated they use a range of digital technologies such as smartphones, tablets and mobile applications, to gain for and communicate dietary and physical activity information to their children, which can be an interactive and fun method. The parents reported that they need more accessible resources including mobile devices and applications, and further support from Schools. This study shows that technology including mobile devices and applications is being used and further are requested to aid parents in communicating dietary and physical activity information to their children in the prevention of obesity. Predictive health modelling was conducted to identify risk factors and trends, which will be presented.

Discussion: Digital technology is being used and are requested to aid parents in communicating dietary and physical activity information to their children. Thus digital technology has potential as a communication tool in contributing in the prevention of obesity.

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**Digital Technologies for Communicating on Weight Loss Maintenance: A Systematic Literature Review**

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Background: Obesity and overweight are recognised globally as significant health risks. Weight loss maintenance is a challenge but may be improved by effective communication of motivational messages. Considerable research exists into the use of digital health technologies for weight management and healthy living, however research into their use for weight loss maintenance is limited. The aim was to systematically review previous randomised controlled trials (RCTs) reporting on the use of digital health technologies for weight loss maintenance, to determine the effectiveness of the technology and identify gaps and areas for further research.

Methods: A systematic literature review was conducted, which followed the PRISMA guidelines. A systematic search was conducted using electronic databases to locate publications dated between 2006 and 2017. The search was designed to focus on the key concepts of *"Digital Technologies" and "Weight Loss Maintenance."* Inclusion and exclusion criteria were applied, including publications focusing on weight loss maintenance where digital technology was used for intervention delivery.

Findings: From 52 papers identified, seven reported on RCTS. There were six trials with adult participants who had successfully lost weight. One other trial included children who engaged in a behaviour change intervention. Three trials used text messaging, one used e-mail, one used a web-based system and two compared web-based systems with face-to-face contact. The trial involving children reported no difference in outcome measures between groups.

Overall, the trials using text messaging showed some significant benefits for maintenance of positive lifestyle changes. E-mail trial intervention participants maintained a greater average weight loss throughout than those in the control group. Face-to-face contact interventions yielded greater long-term benefits for weight loss maintenance and resulted in lower mean weight regain than web-based systems.

Discussion: Digital health technologies have the potential to feasibly deliver effective weight loss maintenance interventions, at least in the short term, but were observed to be slightly less effective when compared with face-to-face interventions. Further research is required into long-term effectiveness of contemporary technologies, efficiency of technology-based interventions, and more recent technological advances for weight loss maintenance.

## 264
## The relevance of theory for understanding and assessing effective health communication: Proposing a model of communication for the analysis of dialogue in clinical settings

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Background: Scholars in health communication have repeatedly advocated clearer pathways leading from the analysis of communication in the clinical setting to patient outcomes. Indeed, it is often the case that both observational and intervention studies do not make explicit the theoretical assumptions grounding the experimental design. This makes it difficult to assess findings and compare results from different studies. In particular, the models of communication underlying many empirical studies are not clear and the notion itself of communication in the clinical setting is frequently considered either as a 'black box', or as a mere collection of skills, independent of any overarching hypothesis on the functioning of human interaction.

Methods: Drawing on studies in the field of pragmatics and discourse analysis, this paper discusses a model of communication grounded in a socio-cognitive approach that seems particularly relevant for the analysis and discussion of communication in healthcare settings.

Findings: Based on a corpus of interactions in a diabetes setting, the paper highlights the tension between intention and attention in the production and interpretation of meaning in interaction, focusing in particular on the debated notions of common ground and shared communicative goals in dialogue with strong epistemic imbalance, as are dialogues in clinical settings. It also describes the argumentative function of communication within these dialogues and its crucial role in decision making and patient education and counseling.

Discussion: The analysis presented is relevant at two distinct levels. On the one hand, it puts forward a proposal of a communication model that allows describing and analyzing relevant discursive processes in clinical dialogues, thus clarifying the link between specific communication functions and outcomes. On the other hand, the analysis reveals the dialogical processes that may cause misunderstandings and misalignments in clinical dialogues, thus also offering suggestions for the improvement of practice and of clinicians' training.

## 265
## The impact of facemask use on the patient-nurse relationship in primary health care

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Background: Personal protective devices are used on a daily basis in health care practice. The situations in which these devices are mandatory are defined, and the advantages associated with their use are recognized. Placement of the facemask in Primary Health Care is recommended only, and it is mandatory in situations of infection as a measure of control. However, it may affect the communication and the relationship between patient and nurse.

Objective: To investigate the impact of facemask use on the patient-nurse relationship in primary health care, where relationships are long-lasting, yet this issue has not been studied.

Methods: A sample of patients with chronic wounds were randomly assigned to an experimental and to a control group. All patients had a previous relationship with their nurses (of at least 18 months). In both groups, the nurses did not wear facemasks. At a second moment, the nurses placed facemasks only in the experimental group. Both groups of patients were otherwise provided the same routine care procedures by the nurses. Before and after the facemask placement, patients and nurses both responded to the PSQ III translated and adapted to the Portuguese population.

Findings: The analysis reveals the effect of facemask placement on overall satisfaction, perception of interpersonal relationship, communication, professionalism and consultation time of patients and nurses.

Discussion: These results allow us to understand the impact of the surgical mask on patients in primary care, informing nurses about the potential changes in relationships when they need to use this device to provide care. This information adds patient-nurse relationship to the reasons behind the use of facemasks found in the literature on primary care, such as contamination or repulsion.

## 266
## Who seeks postgraduate training in clinical communication?

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Background: The rise in the importance of doctor-patient interactions, associated with clinical practice, has brought the attention of health professionals to communication with their patients. Health professionals from various disciplines and specialties are now encouraged to engage in ongoing education. A variety of postgraduate programs exists for healthcare professionals, including postgraduate training in clinical communication.

Aim: This study inquires into the profile of professionals who choose to improve their education in a clinical communication skills program.

Methods: The School of Medicine of Oporto University has, for many years, offered postgraduate programs in various areas, including communication skills. In so far as it is the only school in the country offering such structured programs on clinical communication at the post-graduate level, its students represent the population of the health professionals in the country who seek to deepen their knowledge in communication in healthcare. Data from the application forms of these students are analyzed, and semi-structured interviews are conducted with a subsample of the students.

Findings: Results show the characteristics of the health professionals, and particularly doctors and nurses, who enrol in these communication skills programs in terms of such variables as educational background, specialty, grade point averages (GPA), years of clinical practice and place of work, as well as motivations and expectations for these programs.

Discussion: Understanding who the health professionals seeking postgraduate training in clinical communication are can contribute to the development of programs tailored to their needs. It can also help to identify professionals who might benefit from, yet are not seeking, these kinds of structured programs in communication.

## 268
## Implementing reduced screening: Communicating to women about the recent changes to the Australian National Cervical Screening Program

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Background: In December 2017, the Australian National Cervical Screening Program (NCSP) reduced screening from two yearly to five yearly, implemented primary HPV screening and increased the start age from 18 years to 25 years. Suitable public communication of these changes is essential so as not to undermine confidence in the program. This study aimed to gain an understanding of how communication about changes to screening programs could be handled in the future.

Methods: Six focus groups were conducted in November 2017 in the Sydney area, with 49 women aged 18-74. Focus groups were structured around a presentation of information about the changes to the NCSP, with discussions of the information facilitated throughout. The focus groups were analysed thematically.

Findings: Around 30% of women had heard something about the changes, mainly either the increased interval between tests or the increased starting age. Questions were raised about the test, with awareness of human papillomavirus (HPV) evidently limited. Explaining clearly the difference between the two tests (Pap smear vs HPV test), and that the procedure is exactly the same for both tests, was important to women. Understanding of the new test was key to alleviate concerns about the extended screening interval. Communicating the rationale of the changes to women, in a clear and coherent way, was paramount for acceptance of the new program. In the main, women believed changes to screening programs in the future should be communicated between 6 and 12 months prior to implementation. Younger age groups suggested communication through social media (e.g. Facebook, Instagram), and the older age groups through their GP, posters and TV adverts.

Discussion: Communication of changes to screening programs needs to be clear and coherent to limit negative concerns from the public. Communication strategies need to be adapted for different target age groups, with the findings of this study contributing to an understanding of what information women seek about changes to the Australian NCSP. Starting early, public communication needs to include what is the status quo, what is changing, why there is a change, the benefits of the change, and what practical implications the changes have.

## 269
## Vulnerable Baby Syndrome and Communication after Incidental Findings in Newborn Screening

**Michael Farrell, Mayo Clinic**

Introduction: Vulnerable Child Syndrome is said to be present when a parent persistently overestimates the likelihood of illness, injury, or other mishap following the occurrence of some other health problem, real or imagined. Several theorists suggest that VCS is at least partially a consequence of ineffective communication by health care providers. Vulnerable Baby Syndrome (VBS) has often been listed among adverse psychosocial outcomes after newborn genetic screening (NBS), but its incidence has not been clearly quantified.

Methods: As part of a larger project, 665 parents were interviewed 2-4 months after an incidental finding via NBS of genetic heterozygous (carrier) status for sickle cell disease (n=383) or cystic fibrosis (n=282). The interview script included a spoken version of Kerruish's VBS scale (J Paediatr. Child Health, 2005) and Chew's Health Literacy Screener (Fam Med, 2004). When the results after NBS were much higher than Kerruish's original report, we collected a comparison sample of VBS scale responses from well infants in a primary care clinic (n=79).

Results: The well-baby sample appeared to be higher than Kerruish's sample (t-test, $p<0.01$), although at least some of the difference may have been due to other differences in the sample (e.g. the increased use of mobile phones since 2005 likely affected one of the survey items). The overall VBS scores were lowest for the well-baby sample, significantly greater for the CF carrier sample, and significantly greater still for the SCH carrier sample (ANOVA and Tukey HSD, $p < 0.0001$). In the SCH subsample, VBS was associated with possibility of a health literacy limitation ($p < 0.03$). Significant differences were also found between several of the individual items, and with several demographic data statistically independent of the difference between SCH and CF. Data regarding primary care providers and their communication were compared, but were not significant.

Conclusion: VBS after NBS is real, and substantially more significant than occurs in a well-baby clinic sample. Further research should examine how VBS may be mitigated with efforts to improve patient education and counseling.

## 270
## Acceptability of a Patient-Focused Application-Based Question Prompt List for Cancer Treatment Cost

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Background: Financial toxicity, or severe economic distress due to cancer treatment cost, affects an estimated 30-50% of patients in the United States. Patient-oncologist treatment cost discussions could help alleviate financial toxicity, but they occur infrequently. Question prompt lists (QPLs) have the potential to increase cost discussions, but existing QPLs do not focus on treatment cost, nor are they tailorable to an individual's economic status. To address this, we built an individually-tailorable QPL application (app) focused on discussions of cost (DISCO) and tested its acceptability.

Methods: We recruited a diverse group of cancer survivors, oncologists, and social workers (8 women, 4 men; 5 White, 4 Black, 2 Arab American/Middle Eastern, 1 Asian/Pacific Islander) to review the DISCO app. Using semi-structured interviews, we asked participants to review and provide feedback on the DISCO app's design, the demographic questions patients would respond to for tailoring, treatment cost questions, usefulness for patients, and suggestions for improvement. Each interview was audio recorded, transcribed, and thematically analyzed.

Findings: Six participants reported liking the DISCO app's design and found it easy to read and navigate. One oncologist thought the reading level was too high. Eleven participants had suggestions for improvements to the demographic questions, such as rewording and reordering questions. Ten participants reported liking many or all of the prompted cost questions. Seven participants expressed concern that the physician may not be prepared to answer some of the questions. One oncologist suggested including a simple physician component, such as a short cost fact sheet, that would help prepare physicians for cost discussions. Two oncologists expressed concern that it would be difficult to respond to so many questions in a busy clinic setting and suggested reducing the number of cost questions. Ten participants reported that the DISCO app will likely s\ be useful for patients.

Discussion: Survivors and social workers found the DISCO app acceptable, but oncologists expressed mixed perceptions. A revised version of the DISCO app will be tested in a randomized controlled trial to determine its influence on the frequency and quality of patient-oncologist treatment cost discussions, patients' self-efficacy with managing treatment cost, and financial toxicity.

## 271
## Physician self-disclosure during medical consultations: A gender study

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Background. Self-disclosure (SD) is a communication behavior that is often used to develop and maintain relationships, which can also be found during medical encounters. However, the effect of physician self-disclosure on patient outcomes (e.g. satisfaction, trust, adherence and physician perceived competency) has either produced conflicting results (no effect, negative effect or positive effect), or has not been studied yet. Furthermore, gender differences in the effect of physician SD on patient outcomes have not yet been investigated. The aim of this study it to understand self-disclosure, it's effect on patient outcomes and whether gender differences exist by answering 5 research questions. 1) What type of self-disclosure do physician make during patient-physician interactions? 2) Does the type of self-disclosure differ from male to female physicians? 3) In which consultation segment do physicians self-disclose the most? 4) Does it differ from male to female physicians? 5) Is there a difference in the effect of self-disclosure on patient outcomes for male and female physicians?

Methods. Sixty-nine videotapes of medical consultations have been analyzed. Participants included 69 patients (36 men and 33 women) and 36 primary care physicians (20 men and 16 women). After the consultation, patients filled in a questionnaire reporting their satisfaction, trust, adherence and perceived physician competency. Physician self-disclosure was coded and categorized from the videos. We used hierarchical regression for our analysis.

Findings. Physicians used more counselling type of SD and there were no gender differences in the types of SD used. Physicians self-disclosed the most during the history-taking segment of the consultation and there were gender differences only in the closing segment. Female physicians' SD was associated to higher patient trust and higher perceived competency but lower adherence. Male physicians' SD was associated to lower patient satisfaction, trust and perceived competency.

Discussion. Our study enlarges the literature on physician SD as the literature is still scarce. SD is a communication behaviour that is common in primary care but not well studied. Medical students need to be made aware of the existence of SD and adapt their behavior as most will certainly use it at some point in their career.

**272**

**Behavioural mimicry during video conferencing consultations between medical students and simulated patients**

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Background: Nonverbal communication, as the major communication channel between people, plays an important role in patient-doctor communication. Mimicry of nonverbal communication between doctors and patients improves relational empathy. In this study, we deployed computer algorithms to automatically detect nonverbal behaviour mimicry in video recordings of video-conference consultations between medical students and simulated patients (SP). We then investigated the impact of the mimicry on students' communication skills assessment performance.

Methods: Year 2 undergraduate medical students completed one recorded video-conference consultation with one of two actor SP (SP1 and SP2). At the end of the consultation, the SP used an assessment form to evaluate the student's communication skills. As a pilot study sample, we collected the video recordings of the 10 highest and 10 lowest scoring students on assessment, in the consultations with both SP1 and SP2. We then deployed computer algorithms on these video recordings to detect four kinds of behavioural mimicry (head nodding, head shaking, smiling and frowning).

Findings: The high-score students with both SP performed more instances of mimicry than the low-score students, with the exception of frowning mimicry when interacting with SP1. The frequency of the students' nodding mimicry with both SP was marginally positively correlated with their assessment results (SP1: $r=0.37$, $P=0.11$; SP2: $r=0.4$, $P=0.08$). For students who completed consultations with SP2, their assessment results were significantly positively correlated with their frequency of head shaking mimicry ($r=0.46$, $P=0.04$).

Discussion: While mimicry has been shown to improve relational empathy, the degree of mimicry and which behaviours are copied has been difficult to ascertain. This pilot study provides an initial exploration of the possible mimicry behaviours that impact rapport and empathy, and can provide information in future larger scale studies to encourage students to engage in particular mimicry to improve patient relationships.

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**ListeningTime; participatory development of a web-based preparatory communication tool for elderly cancer patients and their healthcare providers**

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Background: In oncology, both healthcare providers (HCPs) and patients are responsible for achieving effective communication during encounters. HCPs usually control the interaction, while patients are expected to participate actively. This is, however, not always reflected in daily oncology practice, especially in case of older patients. Web-based modelling videos and listening back to audio-recordings of consultations, can serve as supportive interventions to overcome communication barriers.

Aim: To develop a web-based communication tool for elderly cancer patients and their oncological healthcare providers (HCPs). This tool aims to support them to (better) prepare their encounters. An overarching aim of the project is to develop the tool in a participatory way to increase uptake and use.

Methods: Scrum, a participatory framework originated from software development, was applied to develop the tool. Using constant feedback loops, elderly (former) cancer patients, oncological HCPs and their representatives were, as end-users, involved.

Results: During six 'sprints', the communication tool 'ListeningTime' was developed with input from end-users. The use of scrum in developing an innovative tool was challenging in this context, because of time constraints of seriously-ill patients and busy HCPs and the co-creation involving non-profit scientific researchers and a for profit development company.

Conclusions: The collaboration with end-users facilitated the development process of ListeningTime. Early involvement of end-users and flexibility in terms of planning and setup appear to be preconditions for creating a bottom-up inspired development procedure. Several challenges emerged from using scrum as participatory framework. Nevertheless, the 'pressure cooking situation', using scrum, resulted in a quick development process and a product ready for implementation.

## 274
## Observational Checklist Of Health Dialogue Elements (OCHDE): Development And Evidence Of Reliability

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Background: Various health communication assessment tools assess communication skills as exhibited in health dialogues between healthcare providers and patients. The two-fold aim of the paper is to describe the development of an Observational Checklist of Health Dialogue Elements (OCHDE) and to establish evidence of reliability.

Methods: A checklist for observing dialogue and an accompanying guideline was developed, theoretically founded in a concept analysis of health dialogue. Because an assessment tool grounded in a participatory paradigm should encourage two-way communication patients and healthcare providers were observed simultaneously.

The reliability testing of the OCHDE required a quantitative research design. The population (N=45) consisted of academics, having a focused interest in health communication between patients and healthcare providers. A convenient sample (n=21) participated. Preceding the reliability testing, participants received training on the completion of the checklist. Participants individually and simultaneously viewed the videotaped simulation on personal computers and completed the checklist aided by the guideline. The responses of the participants on observations in the OCHDE were analyzed using the SPSS version 23 to establish evidence of reliability of the checklist.

Findings: The OCHDE consists of sections and elements - aligned to the identified antecedents and empirical referents of the concept analysis of health dialogue.

Reliability testing was only performed on antecedents. Empirical referents, consisting of four open-ended questions, could not be observed by means of a videotaped simulated health dialogue since it included post dialogue responses. The antecedents allowed for 27 observations of healthcare providers and 26 of patients.

**According to Cronbach's alpha the OCHDE antecedents provides a reliable measure for health communication skills related to both healthcare providers (α = .779) and patients (α = .830).**

Discussion : Though reliability test results of other communication skills assessment tools are not readily available, the conclusion is that the OCHDE is as reliable as other communication skills assessment tools to simultaneously observe health dialogue between healthcare providers and patients. The OCHDE was developed for a real life clinical setting, particularly those involving patients with chronic conditions, but is also suitable as a tool to train and assess health communication skills or to conduct research.

## 275
## Comparing Physician and Patient Ratings of Physicians' Non-English Language Skills

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Background: Outcomes for patients with limited English proficiency (LEP) are better when they have a language concordant physician. There are no standards for measuring physician language proficiency. Prior studies have compared physician self-report of language skills to a validated oral proficiency interview. No prior studies have

matched patient and physician ratings. We compared physician self-report to LEP patients' ratings of their physicians' non-English language abilities.

Methods: We asked 344 patients whose preferred language was not English to evaluate their physician's non-English language ability. We surveyed 36 physicians whose non-English language ability was rated by at least one patient. We used generalized linear mixed models to compare physicians' self-ratings to patient ratings.

Results: Among patients (n=344), 39% preferred speaking Cantonese, 32% Spanish, and 28% Mandarin. The average age was 72, 69% were women, and 48% reported less than a high school education. Among physicians (n=36), 50% reported speaking Spanish, 36% Mandarin, and 14% Cantonese. Fourteen percent of physicians reported excellent language abilities, 33% very good, 42% good, 3% fair, and 8% poor/none. We estimated the reliability of physician ratings by patients by fitting linear mixed models that accommodated clustering within physicians. Ratings were more reliable when more patients rated the physician, e.g. the intra-physician correlation was 0.72 with 5 patient ratings, 0.78 with 7 ratings, and 0.84 with 10 ratings. We then modeled all ratings (both physicians and patients) and found that patient ratings were about 0.5 points higher than the corresponding physician self-rating. We found that mean patient ratings and physician ratings were independent of one another (p=.28). Finally, we found that there was a significant difference between the marginal distributions of patient and physician ratings (p=.01).

Conclusions: The reliability of patient ratings improves when more patients have rated each physician. There is also evidence of bias in the ratings, as patients tend to provide higher ratings and physicians provide lower self-ratings. Averaging patient ratings may not be a useful measure of physician language ability. Health care systems wishing to include patients' ratings would be best served if they can include a larger number of patient ratings.

## 276
## Pilot RCT of integrative nutritional counseling among Chinese Americans with type 2 diabetes

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Background: Chinese Americans with diabetes often use Chinese medical principles to make food decisions and struggle to follow standard biomedical diabetic diets that focus on food measurement/restriction. We developed a theoretically-informed integrative nutritional counseling program that combines Chinese medicine principles with biomedical nutrition standards. We tested the feasibility of implementing the program as part of standard diabetes self-management education (DSME).

Methods: We conducted a pilot cluster RCT at a public health clinic. DSME group classes were randomized to provide usual nutrition curriculum (control) or integrative nutritional counseling (intervention). Intervention participants first met with a licensed acupuncturist for a Chinese medicine diagnosis, then received DSME with integrative nutrition counseling. Time- and attention-matched control participants were interviewed by a research assistant about their diabetes and received DSME with American Diabetes Association nutrition recommendations. Data were collected at baseline, immediately following the nutrition class, and at 6-month follow-up. We measured pre/post intervention changes in dietary self-efficacy, diabetes distress, dietary adherence, weight and glycemic control by hemoglobin A1c. We assessed satisfaction with the DSME curriculum with Likert scales.

Findings: Participants were 16 Cantonese-speaking patients with diabetes (87% female, 100% income less than $50,000, average age = 60.7, years in U.S. = 17.5) with low levels of acculturation. The nutrition component of DSME was well received with an overall average rating of 4.3 (range 15). Preliminary data comparing pre- to post-intervention outcomes indicate decreases in diabetes distress (e.g., emotional burden and interpersonal distress); and decreases in unhealthy eating habits (6.9 to 5.9). Slight decreases were also observed in hemoglobin A1c (from 7.2% to 6.9%) and weight (134.5lbs to 131.9lbs).

Discussion: Integrative nutritional counseling is feasible to implement in diabetes self-management education classes and shows promise as a culturally-sensitive approach to diabetes nutrition for Chinese American patients. Materials are printed with both English and Chinese and can be used by biomedical and Chinese medicine practitioners with their patients.

**277**
**A live peer learning cross cultural communication workshop including skills to work effectively with healthcare interpreters**

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Background: Mayo Clinic requires cross cultural communication education for all new clinical providers. One of the learning objectives of the live peer learning workshop is to identify and practice skills to work effectively with healthcare interpreters. Providing this education is essential to maintaining compliance with external organizations as well as with internal communication assistance policy.

Methods: The session on healthcare interpreters involves mini-didactics, facilitated large and small group sessions, video vignette with debrief, skills demonstration and skills practice.

Results: Post workshop assessment includes both quantitative and qualitative data. In 2017, 427 clinical providers attended the workshop and 225 completed evaluations (53% response rate). Post workshop questionnaire included the following results (mean ± SD on a scale from 1=poor – 5= excellent) Achieving the learning objective: 4.40 ± 0.64; overall value of workshop: 4.31± 0.73; and overall quality of the workshop was 4.36 ± 0.78.

Self-reported qualitative data regarding knowledge, competence, performance and patient outcomes included statements of improved knowledge of how to effectively work with interpreters, a better understanding of the benefits of using trained interpreters, and a commitment to more frequently utilizing interpreters. 22% of the providers completed free text comments on how this section was useful or would result in a positive change in their practice. Multiple providers noted that having time to gain an interpreter's perspective on the optimal way to work with an interpreter was extremely valuable.

Discussion: Providers found that the learning objective was achieved. We believe that with the language needs of our global patient population, building and practicing skills to work effectively with healthcare interpreters involving a live peer learning session has benefit to clinical providers and healthcare organizations.

**280**
**The Hourglass Curriculum: A Resident-Driven Curriculum to Promote Wellness**

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Topic and purpose of discussion: Addressing physician wellness has recently become a top priority for many residency programs. When physician wellness is neglected, it negatively affects all team members and most importantly patients. Resident trainee physicians are especially susceptible to burnout as they take on increasing responsibilities, lack autonomy, face challenges with work-life balance and deal with higher expectations as physicians. Time, especially during training, passes most quickly when we want it to linger. Being a resident exponentially increases this truth. We all seem to live in an era of time poverty and suffer from 'multiple hat syndrome'.

Our intervention aims to create a culture of free expression of thoughts and ideas without any preconceived notions. We facilitated nurturing a sacred space, which allows the inner authentic voice to be heard, thereby reducing emotional exhaustion, promoting self-awareness and personal accomplishment.

Brief outline of session: Each class of ten individuals meet every eight weeks and have an hour-long session in the presence of a symbolic hourglass for a round table discussion. The hourglass is our symbolic metaphor that represents the dimension of time in our lives. For each session, a subject (i.e. compassion, resilience, coping, finding joy in work) is selected to be the focus of the reflection exercises, which are moderated by a trained facilitator and resident champions. With guided discussion, resident trainee physicians are encouraged to reflect on their own experiences, openly express their thoughts and pool their collective wisdom gained from these experiences. Qualitative ongoing survey data demonstrate benefits in residents' morale and engagement.

Outcomes hoped for from the discussion: In this era of resident burnout, these sessions not only help us connect with each other at an authentic and spiritual level but foster a new sense of faith and hope within us and amongst

each other. Facilitating a venue for open dialogue among the resident trainee physicians allows them to express their inner voices for a true and honest exchange of perspectives. In conclusion, these sessions strengthen the fortitude and resilience of our hourglass!

To the best of our knowledge, the hourglass curriculum is not being organized by an already established group.

## 281
## The Art of Balance: Caring for Physician and Patient

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**Adera Causey**
**Laurie Melnik**

Most medical students enter training reciting the inspiring words of the Hippocratic Oath (or its equivalent) at their white coat ceremonies. The central pledge of all these oaths is to care for patients with utmost sincerity, empathy and kindness. While this has traditionally referred to the care for patients, the Gold Foundation and others have suggested that this same language should refer to the physician's self-care as well. As physician burnout increases, the need for situating resilience training in medical education has become a serious consideration (Howe, Smadior, & Stökl, 2012). Medical education often includes case studies of challenging scenarios as a way to develop ethical reasoning and diagnostic skills, but emotional demands of maintaining a highly disciplined work ethic requires explicit training as well. Incorporating resilience training within situation-based exercises has been considered an effective approach in medical education (Beckman, Reed, Shanafelt, & West, 2012) and invites an arts-based praxis that cultivate empathy, interpersonal awareness, collaboration, and reflective practice.

The University of Tennessee College of Medicine at Erlanger partnered with the Hunter Museum of American Art and the Southeast Center for Education in the Arts on developing The Art of Balance: Caring for Physician and Patient. The program is designed to build physician resiliency through a focus on teamwork and empathy with a focus on developing strategies for overcoming physician burnout. This program has to date served 95 medical students in their 3rd and 4th years with each session around a select theme but remains organic and responsive to student needs as they emerge in the session. Sessions begin with a written exercise in which the students reflect upon a series of prompts related to their clinical experiences and respond to works of visual art and to some activations allowing them to put the new tools into practice. There are several assessment tools built into the process that allow medical and arts facilitators to continually refine the sessions to best meet student needs. This poster presentation unpacks a sample session of our teaching project and how the program supports varying needs related to physician burnout.

## 282
## Mindfulness for Preclinical medical students

**Sarah Shepherd, University Of Manchester**
**Claire Mimnagh, University Of Manchester**
**Mary Walsh, University Of Manchester**

Background: Research conducted with British undergraduate medical students suggested that one in four were categorised as 'burned-out.' Further research suggests self-care in medical education as central to the ability to deliver patient centred care as a qualified doctor. This study aimed to evaluate the effect of a brief mindfulness intervention on mental well-being, self-efficacy and burnout in a sample of first and second year undergraduate medical students.

Methods: Year 1 and 2 medical students were invited to a 5 week Mindfulness course. Measures taken pre and post the course included the: Maslach Burnout Inventory Student Survey (MBI-SS), Warwick-Edinburgh Mental Well-being Scale (WEMWBS) and General Self-Efficacy Scale (GSE). Data was analysed using Wilcoxen signed rank test. A focus group was run 1 month post course and analysed using framework analysis.

Intervention: The mindfulness course was led by an experienced facilitator. It consisted of 5 weekly group sessions, each lasting one hour. The training included guided meditations and mindfulness skills teaching, with handouts covering key mindfulness concepts and a podcast of key meditations.

Findings: Sample: 37 participants, 22 completed both sets of measures; 14 male, 19 female; 15 in year 1, 18 in year 2.

Survey results:

MBI-SS: Pre-mindfulness 50% 'burnt-out' post-mindfulness 4%. MBI-SS: Pre-mindfulness 50% 'burnt-out' post-mindfulness 9%. Subscales, emotional exhaustion and cynicism significantly reduced (p=0.002, p=0.036) post mindfulness; professional efficacy remained similar (p=0.238).

WEMWBS:  Mental Well-being increased (z = -3.554, p = <.001, r = 0.55).

GSE: Self-efficacy increased (z = -2.274, p = < .023, r = 0.34)

Focus group themes (n=7):

The (un)acceptance of 'stress' in medical school

Understanding the impact of thoughts on behaviour

Feeling 'OK'

Discussion: Although this was a brief intervention participants reported assimilating the skills of mindfulness. The intervention had significant impact upon perceived wellbeing. Further study is needed to consider the maintenance of skills and the long term impact on self-care / burnout and delivery of patient centered care. Establishing early habits of self-care is imperative in a medical degree.


## 283
## Tomorrow's Doctors: Balint Group as an important tool for medical education

**Edlaine Villela, School of Medicine, Institute of Health Sciences, Federal University Of Goiás (UFG)**
**Andréia Rosa, School of Medicine, Institute of Health Sciences, Federal University Of Goiás (UFG)**
**Betina Oliveira, School of Medicine, Institute of Health Sciences, Federal University Of Goiás (UFG)**
**Cristian Costa, School of Medicine, Institute of Health Sciences, Federal University Of Goiás (UFG)**
**Thâmara Costa, School of Medicine, Institute of Health Sciences, Federal University Of Goiás (UFG)**
**Fábio Oliveira, School of Medicine, Institute of Health Sciences, Federal University Of Goiás (UFG)**

Background:  The Balint Groups have helped medical students to understand the patients, by improving listening for these tomorrow's doctors. This technique has been adopted to strengthen the physician-patient relationship in the future, focusing on the training of general practitioners. The Balint Groups enable the development of medical students' mature professional identity and enhance them willingness and capability to reflect on difficult issues with colleagues. In this context, a Brazilian medical school has implemented the Balint Groups in 2017.

Methods:  An exploratory study of qualitative approach was carried out in a Midwest Brazilian School of Medicine. Eight students Balint groups sessions were done in six months (75 minutes each), with 12 third year medical students/group, one experienced professor as leader and one professor as a co-lider. The students were followed up during the eight sessions.

Findings:  The participants presented cases in the context of physician-pacient relationship and physician-student such as confusion experiences in medical education and reflections among colleagues related to bad experiences, remembering the concept of a case for students' group needs to be wider than in a traditional Balint Group. Through content analysis, the main themes discussed in the groups were: feelings related to patients; negative role models; co-operation with other medical professionals; negative examples that helped students to clarify their own professional identity. Most of the cases reported empathy (75%) and medical errors (50%). Students realized how important is to develop empathy to ensure good professional performance.

Discussion:  Students recognized the value of the Balint groups for medical education because it is well known the process of "automation" of the physician-patient relationship during the graduation. The Balint Groups allowed to exercise empathy among the participants and to present their anguish relate to their own unpreparedness. Students identified their own limitations and accepted them. The shared experiences strengthened them to deal with hard situations in their future clinical practice.


## 284
## Communication with oncology patients in the Polish general practice system

**Nadia Bryl, Clinical Psychology Unit, Family Medicine Dept., University of Medical Sciences**
**Magdalena Witt, Dept. of Medical Rescue, University of Medical Sciences**

Working with oncology patients in the GP's office is associated with a number of psychological challenges. First, a doctor must demonstrate a high level of social competence during contact with patients because the problem of neoplasia always causes severe mental strain. Secondly, a doctor faces a high personal psychological cost, associated with the unavoidable emotions resulting from the specificity of the doctor/patient relationship.

A survey took place April-May 2015. 108 GPs practicing in the Wielkopolska region were evaluated via a questionnaire (65 females, 43 males, mean age of 44). The average work experience of the doctors covered by the study was 17.6 years (min. 1 year, max. 40 years). Frequency of contact with patients was also measured. 7.4% of all the doctors surveyed had dealt with oncology patients daily, 20.4% once a week, 46.3% once a month, and 25.9% of respondents dealt with patients less than once a month.

The most difficult situations in the contact with the patient the respondents faced were the patients' physical suffering (54,6%), feelings of helplessness (44,4%), anxiety (42,6%) and sadness (41,7%). The most common negative emotions on the part of physicians in their relationships with cancer patients were sadness (57,4%), helplessness (50%), emotional fatigue (41,7%). Apart from that, many doctors were frustrated by the financial and organizational limitations of the Polish Healthcare system (69,4%) and by sharing bad news with patients and their families (23,1%). Only 11% of the respondents indicated a good relationship with the patient as a positive motivator in their work.

The above results indicate a lack of interpersonal skills within the surveyed group of Polish GPs. Arguably, insufficient standardized training in doctor/patient communication has been available to oncology specialists, both during the course of university education and subsequent internships in GP offices. Lack of these competencies results in an increase in emotional burnout among doctors and their inability to build good relationships with patients. The authors suggest the introduction of a course in communication skills, based on EACH Train the trainers programs, which would be obligatory for all medical students and residents in family medicine in Poland.

**285**
**Influence of trainee dentists' self-reported empathy on their communication characteristics in medical interviews and subsequent evaluations by simulated patients**

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**Sho Watanabe, Department of Comprehensive Dentistry, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University**
**Takayuki Kono, Comprehensive Dental Clinic, Okayama University Hospital**
**Hajime Shirai, Comprehensive Dental Clinic, Okayama University Hospital**
**Hiroaki Taketa, Comprehensive Dental Clinic, Okayama University Hospital**
**Noriko Shiotsu, Comprehensive Dental Clinic, Okayama University Hospital**
**Yasuhiro Torii, Comprehensive Dental Clinic, Okayama University Hospital**

Background: In this study, we aimed to clarify characteristics of dentist–patient communication that influence trainee dentists' self-reported empathy in initial medical interviews. We also examined whether the level of the trainee dentists' empathy influences their evaluation, as viewed from the perspective of simulated patients.

Methods: We analyzed initial medical interviews conducted by trainee dentists with simulated patients (SPs) who presented concerns primarily about the potential severity of persistent stomatitis on their tongues. A total of 100 trainee dentists (46 men, 53 women) and eight SPs participated. The trainees completed the Japanese version of the Jefferson Scale of Physician Empathy (JSPE) before the interview. They were classified into two groups (high empathy and low empathy) based on the mean JSPE score. The characteristics of utterances between the trainees and the SPs during the medical interview were analyzed using the Roter Interaction Analysis System (RIAS). Six categories were added in the task-focused exchange to conduct analysis in consideration of the dental context. After each medical interview, SPs evaluated the trainees' attitudes using an assessment sheet that included five questions to be answered on a four-point scale. Response data were analyzed using a Mann–Whitney test.

Findings: Compared with trainee dentists whose empathy was rated low, those whose empathy rated high used more effective responses, such as legitimizing statements and empathetic statements, and used more closed-ended questions. They also asked more questions regarding therapeutic regimen and lifestyles. SPs gave more positive indicators, such as backchannel responses and showing agreement or understanding, and provided more lifestyle information to the trainees who exhibited higher empathy. SPs also tended to more highly score the trainees whose empathy was high.

Discussion: The results show that trainee dentists whose self-reported empathy was high had more emotionally rich exchanges with SPs and showed success in expressing empathetic behavior. SPs' more positive evaluations of the trainee dentists whose self-reported empathy was high suggest that improving health providers' empathy contributes to patient satisfaction. It is therefore important to foster such empathy.

## 286
## Practicing empathy in relationships with people from vulnerable groups

**Miguel Barbosa, Universidade De Lisboa, Faculdade De Medicina**
**António Pais-de-Lacerda, Universidade De Lisboa, Faculdade De Medicina**
**Madalena Patrício, Universidade De Lisboa, Faculdade De Medicina**
**António Barbosa, Universidade De Lisboa, Faculdade De Medicina**

Background: Empathy is the cornerstone of the doctor-patient relationship. Empathy skills should be trained throughout the years of medical school with real persons. The aim of this study was to assess medical students' capacity to respond empathically to patients.

Methods: 260 First-year medical students interviewed individually chronically ill patients, disabled persons, or persons in the context of social vulnerability (e.g., prisoners, prostitutes, homeless, refugees). After the interview students must register in direct speech two excerpts of the interview in which they were empathic with the person they interviewed. 520 statements were subjected to a content analysis.

Findings: Four major categories of statements emerged: consolation, problem solving, interest/exploration, and empathic. The consolation statements were the most prevalent, followed by problem solving, interest/exploration, and empathic. The relational context in which the most empathic responses were observed was in people with disabilities.

Discussion: The data suggest that students find it difficult to formulate empathic comments, confounding them with consolation statements. Although some people are more empathic than others, empathy skills can be learned and the different contexts of social vulnerability seem to influence this performance. Medical schools has an important role in teaching empathy skills namely from the first year curriculum and using different pedagogical strategies.

## 287
## What medical students´ want to know about health literacy?

**Miguel Barbosa, Universidade De Lisboa, Faculdade De Medicina**
**António Pais-de-Lacerda, Universidade De Lisboa, Faculdade De Medicina**
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Background: Interactive lectures can increase students´ involvement, satisfaction, attention and motivation. Asking students to write questions and ideas about the issue of an upcoming lecture is a strategy to stimulate their participation. The goal of this study was to understand the medical students' awareness about health literacy prior to a lecture about this topic.

Methods: One week before a lecture about health literacy were requested to 85 first year medical students divided in 17 groups to send questions and comments to be discussed during the lecture. This material was subjected to a content analysis.

Findings: From the content analysis emerged the following categories: 1) patient-physician relationship (1.1. health literacy role in patient-physician relationship; 1.2. assessment of patients´ health literacy skills and knowledge; 1.3. adjusting communication style to particular individual patient; 1.4. fear that the patients´ knowledge affects the medical status); 2) internet / information and communications technology (ICT) (2.1. role of ICT in health literacy; 2.2. risks related with the available health information on internet); 3) impact of low health literacy on health status and cost; 4) strategies to improve health literacy (4.1. improve physician communication skills; 4.2. introducing this issue in medical schools curricula; 4.3. introducing political and educational changes); 5) health literacy as a critical skill to empowerment; 6) ethical issues in health literacy.

Discussion: Asking students´ ideas before health literacy lecture stimulated students' engagement in class. Structuring the lecture based on students´ questions and comments makes it easy to meet the learning needs of students and to understand some of their prejudices.

**288**
**Health literacy assessment of Croatian patients with the Newest Vital Sign screening test**

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**Goranka Rafaj, Technical College Bjelovar**
**Gill Rowlands, Institute of Health and Society, Newcastle University**

Background:  The aim of this study was to develop a linguistically validated Croatian version of the Newest Vital Sign (NVS) health literacy test, and to use it for health literacy assessment of hospital patients in Croatia.

Methods:  A full linguistic validation procedure was applied, including two forward translations of the NVS-UK version, a backward translation of the reconciled version, expert panel reviews, cognitive interviews with 10 respondents from general population, and full involvement in the procedure of the NVS-UK version developer. The final Croatian version was used for health literacy assessment of hospital patients in four departments of a large hospital center in the eastern part of Croatia. Data on patients' sociodemographic profiles and their opinion on health literacy testing were collected. Written informed consent was obtained from all patients, and the hospital ethics committee approved the study.

Findings:  Health literacy (HL) testing on a convenience sample of 100 hospital patients (55% women, median age 63.5 years) revealed 58% of patients had less than adequate HL level (scores less than 4), and mean NVS total score was 3.34. Only one patient answered incorrectly all questions, and seven patients answered correctly all six questions. Question 1 was the most difficult, with 24% of patients answering correctly. A positive significant association was observed between HL and educational level ($p = 0.002$). A high percentage of patients (92%) did not object to being tested for HL by their primary care physician or in hospital, and 99% of patients would recommend HL testing among patients in general.

Discussion:  Linguistic validation procedure, in particular cognitive interviews, facilitated interpretation of poor results in some test items obtained during HL assessment of hospital patients. The patients' positive views on HL testing and mean completion time of 4 minutes indicate that the Croatian version of the NVS (NVS-HR) could be recommended for use in both clinical and research settings in Croatia. This quick and simple HL screening tool could enable healthcare professionals to more effectively tailor their communication with patients.

**289**
**Visual communication in health promotion – A new approach to health literacy**

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**Ana Alexandrino da Silva, ISCTE - Instituto Universitário de Lisbon & CIES**

Background: Health literacy is often mentioned as a crucial determinant for population health promotion. There are three main strategies to promote health literacy: verbal communication, written communication and visual aids. While verbal and written communication are well covered and validated, the use of visual aids in health is still an investigation gap in most countries, apart from its importance in simplifying medical information and facilitating knowledge transfer to patients. This strategy may require some adjustment but it is possible to apply it both in countries without technological equipment (focusing in healthcare facilities and printed materials) and countries with a well-developed information technology (IT) network (focusing in healthcare facilities, mobile and online communities), regardless from patients' literacy.

Methods: Medical information can be translated into more appealing formats, increasing people focus and memorization: pictures, infographics, schemes, comics and videos. Numerical information is also convertible to easily understanding materials.

Findings: A recent study estimated a 73% prevalence of limited health literacy in the Portuguese population, using the newest vital sign for the assessment of literacy in primary care. There is no detailed data related with the use of healthcare visual communication  in Portugal, but various studies in Europe and America with specific population

groups (mainly elderly, pregnant women and children) found a positive impact on the use of visual aids in overcoming medical information barriers, promoting patients' understanding and knowledge transference (e.g. Marie Neurath's malaria communication materials are a simple but effective example of this approach to medical communication).

Discussion: Health policies and healthcare workers should guarantee that patients understand their health status, diseases and treatments. Information design is described as "the art and science of translating complex, unstructured data into useful information that can be used with efficiency and effectiveness" and it is a new tool that can be widely used in health promotion. Therefore, a broader approach to health is essential, including a communication and visualization perspective with a common objective: address patients' barriers to medical information and provide more appealing and understandable educational materials, using visual aids as main drivers.

## 291
## Effect of health-literate design for an online planning tool on unhealthy snacking behaviour: An experimental study

**Julie Ayre, University Of Sydney**
**Carissa Bonner, University Of Sydney**
**Erin Cvejic, University Of Sydney**
**Don Nutbeam, University Of Sydney**
**Kirsten McCaffery, University Of Sydney**
**Kristie Weir, University of Sydney**

Introduction: To date, health literacy interventions have focused on education and motivation rather than volitional processes (e.g. planning and self-monitoring). This is surprising given their central role in behaviour change research. This study aimed to address this gap by investigating whether health-literate design for volitional processes can increase the effectiveness of an online planning tool to reduce unhealthy snacking for low health literate users.

Methods: 440 participants completed baseline measures of self-reported unhealthy snacking and health literacy (NVS: Newest Vital Sign). They were randomised to 3 online planning interventions: 1) health-literate design (one snacking situation paired with a specific behaviour change); 2) instructions to create a detailed plan; or 3) a healthy snacking fact sheet. Baseline snacking, intervention, NVS, age, education, and home language were entered into a multiple regression model to predict unhealthy snacking at 4-week follow-up.

Results: 373 participants (84.8%) completed the follow-up survey. On the NVS, 24% had high and 25% had possible likelihood of limited health literacy; 52% had adequate health literacy. Participants ate 16.2 serves of unhealthy snacks per week at baseline. Unhealthy snacking at follow-up was associated with lower health literacy (b=-1.7, p=0.015). There was no difference across intervention groups. However, participants with lower NVS scores who used the health-literate tool ate fewer unhealthy snacks compared to those who used the detailed planning tool; whereas those with higher NVS scores ate fewer unhealthy snacks using the detailed planning tool (b=1.7, p=0.027). The model explained 18% of variance in snack scores (F=9.0, p<0.001) and estimated that people scoring 2 points below the mean NVS (M=3.4, SD=2.0) ate 8 fewer serves of unhealthy snacks if they used the health-literate tool, whereas people scoring 2 above the mean NVS ate 6 more serves of unhealthy snacks using the same tool.

Conclusion: The online planning tool with health-literate design was beneficial for people with lower health literacy but not for those with higher health literacy. Targeted health literacy interventions could be improved by using volitional strategies that have lower health literacy demands.

## 292
## A Normalisation Process Theory perspective on GP attitudes towards a proposed type 2 diabetes app: An interview study

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**Rajini Jayaballa, Western Sydney Diabetes**
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Introduction: This study aimed to explore general practitioners' (GPs) attitudes towards a proposed type 2 diabetes self-management app for patients with lower health literacy. Interviews were conducted during a period of transition in Australia towards a more integrated primary care model called 'Health Care Homes'.

Methods: 25 semi-structured interviews explored GP attitudes about the feasibility of diabetes apps for their patients with lower health literacy. The interview schedule discussed an app design that would integrate the GPs' health care plans and services. Interviews were audio-recorded, transcribed and coded using Framework Analysis to ensure rigour, guided by Normalisation Process Theory.

Results: Three overarching themes were identified: 1) role of face-to-face care; 2) concerns about delineating GP/patient responsibilities; 3) attitudes towards workload changes. Theme 1 identified beliefs underpinning a commonly expressed preference for face-to-face care. GPs perceived information was more tailored, salient and better understood, and presented with greater empathy when delivered face-to-face, rather than online. Theme 2 reflected perceptions of how an app might increase responsibility for the GP. Concerns about patient safety, liability and workload influenced attitudes towards the app. GPs also discussed strategies to overcome these concerns, such as monitoring patients' use of the app, limiting the use of synched data, and maintaining patient autonomy in prompts and advice. Theme 3 focussed on attitudes towards app implementation, particularly in the context of transitioning to Health Care Homes. Most GPs anticipated an initial burden whilst learning to use a new clinical tool. Some GPs accepted this burden on the basis that the change was inevitable as healthcare became more integrated. Others reported the potential benefits were outweighed by effort to implement the app.

Conclusions: This study provided insight into GP attitudes towards a diabetes app integrated with primary care services. This was observed as more than just a technological change; GPs were concerned about changes in liability, workload, and the nature of consultations. This research highlighted potential facilitators and barriers to engaging GPs in the implementation process.

## 293
## Challenges with Advance Care Planning Implementation and its Quality Indicators in Scotland

**Jackie Kandsberger, University Of Glasgow**

Scotland has high levels of policy encouragement for end of life Advance Care Planning (ACP) as well as a national electronic 'Key Information Summary'(KIS) system for sharing ACP information to support its use. However, evidence of effectiveness is scarce. The main objectives of this study were to explore a) ACP operationalisation from the primary care perspective, b) its challenges, and c) implications of measuring ACP success against the existence of a KIS and the quality indicators of place of death and time spent in hospital.

Throughout 2017, ACP data were extracted from 327 expected death medical records of patients registered with nine recruited GP practices in one region of Scotland. For 100 of these cases GPs completed an accompanying survey focused on the determinants and constituent elements of the ACP conversation. A survey on the implementation of the ACP process, based on Normalisation Process Theory (NPT), was also completed. Summary statistics have been calculated.

The returned NPT surveys revealed that ACP is a coherent process to professionals and that there is high cognitive participation. Yet, time is a barrier to implementation and feedback to improve the process through reflexive monitoring is missing. The highest prevalence of KISs was among cancer patients. The number of discussions varied, and a quarter of patients were not open to or had lost capacity for decision making. Overall, discussions often involved family (66%), and centred mostly around specific clinical wishes (53%), concerns (50%), and relationships that influence decisions (41%), rather than cultural values (9%) or spiritual beliefs (4%). Further analysis linking surveys and medical records will be conducted; it is anticipated that relational and structural determinants will moderate the relationship between having a KIS, discussions, and the clinical outcome of place of death and time spent in hospital in the last 6 months of life.

End of life care planning conversations consist of multiple mechanisms, not all of which are addressed in the primary care setting nor reflected in the quality indicators. Influences of determinants, as well as professional and personal roles within this complex conversation intervention need to be clarified and addressed.

**294**

**Implementation of Discutons Sante a web-based tool in primary care practices: lessons learned**

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Background: Engaged and informed patients participate more actively in discussions with their healthcare providers (HCP), enhancing the effectiveness of medical consultations. Discutons Santé (DS), a unique French web-based tool, was developed in 2012 to provide information to patients about communication skills to use with their HCP, and helps them prepare their medical visits. We aimed to evaluate the implementation of DS in primary care practice routines.

Methods: DS was implemented between March and June, 2017 in two Family Medicine Clinics (FMC) in Laval, Canada. The implementation strategy was developed in collaboration with patients, clinic managers and volunteer organizations. Promotional materials included: DS information added to the voice message and e-mail confirmation of the appointment; video and posters displayed in the waiting rooms; bookmarks distributed to patients by the receptionist or volunteers. All HCPs and clinic staff were invited to an information session about DS. Volunteers were trained to present DS to the patients in waiting rooms. Awareness of patients about DS was assessed by questionnaire six months after the implementation in one of the FMC.

Findings: The use of DS was promoted by 10 volunteers and 12 clinic staff. From the 1,557 patients approached in the waiting rooms, 164 agreed to watch a demonstration on how to use DS and 22 opened a DS personal account while waiting to see their HCP. Only 48 (3.1%) patients declined receiving information about DS. The website traffic increased by 22.6% during the implementation, along with an increase of 8.3% of new visitors. The number of patient accounts created doubled, reaching 58 per month. Six months after the implementation, 30.6% of the patients indicated that they had heard of DS.

Discussion: DS was generally well received by patients. Still it remains a challenge to get patients involved in preparing for their medical visit using this type of website. These results are surprising considering the buy-in by the HCP and the multi-pronged approach developed to promote the use of the site by the clinic patients. We are now actively exploring the potential barriers and hope that this additional input can inform an improved implementation strategy.

**295**

**Studying the placebo-effects of communication in a clinical RCT: encountered challenges and solutions**

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**Sandra van Dulmen, Nivel**
**Bram Thiel, OLVG**
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**Menno Kaunang, Nivel**
**Stephanie Immerzeel, Nivel**
**Marc Godfried, OLVG**
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Background: Placebo-effects attributable to health care professionals' communication (i.e. expectancy and empathy manipulation) have primarily been shown in laboratory settings. We designed an RCT to determine the effects of nurses' expectancy and empathy manipulation during pre- and post-operative tonsillectomy care on patients' (pain) outcomes. Studying the placebo-effects of communication in clinical care posed us with ethical, practical, and methodological challenges.

Methods: Using a 2x2 RCT design 128 adult tonsillectomy patients are randomly assigned to 1 out of 4 conditions differing in the level of expectancy manipulation (standard versus enhanced) and empathy manipulation (standard

versus enhanced). Daycare ward nurses were trained to deliver the intervention, and patients are treated following standard analgesia protocol and hospital routines. **Primary outcome is patients' perceived pain.**

Findings: Ethical challenges included creating a standardized communication protocol, in which conditions differ as much as possible while remaining realistic and not including suboptimal communication.

Practical challenges included ensuring all providers not involved in the study used neutral communication, setting up electronic systems to identify patients, and standardize practice surrounding the operation routine.

Methodological challenges included the standardization of the pain protocol, in order to ensure we can infer causal effects of the manipulated communication. These and other challenges and the chosen solutions will be discussed.

Discussion: Studying the placebo-effects of communication in clinical care asks for intense collaboration between researchers, clinicians and the hospital logistic support system. A fine balance between experimental rigor and the sometimes uncontrollable clinical reality needs to be found. Future projects aimed to study the causal effect of communication in clinical care could benefit from taking the encountered challenges and solutions into account.

## WIP.P.1
## ACTION – A Person-Centred Communication Intervention in home care of older persons

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**Tanja Gustafsson, University of Borås**
**Elisabeth Lindberg, University of Borås**
**Hanna Maurin Söderholm, University of Borås**
**Inger K. Holmström, Mälardalen University**

Background: The communication between professionals and recipients of home care services is important in order to assure the quality of home care services and to promote older persons independence and influence over their lives. Previous research indicates several challenges related to communication and care of older persons, and challenges related to how to deliver efficient educational efforts in the home care context. To date few educational interventions to enhance the communication competence for nursing staff have been tested. The aim of this study is to develop and test a web-based educational intervention on communication with older persons in home care settings.

Method: In this pilot study, a web-based educational intervention is developed. This intervention consists of several modules on different aspects of communication and person-centred care. A flexible learning platform is used for web-based lectures, movies of role-play, quiz-questions and reflecting exercises to complete for the nursing staff.

The educational intervention will be evaluated with pre- and post-assessments and a process evaluation. The assessments will include audio recordings of communication during home care visits and questionnaires on self-efficacy communication skills and job satisfaction. Process evaluations will be performed based on interviews with participating staff before, during and after the intervention. Audio recordings will be analysed for empathic opportunities and responses to these by nursing staff.

Request for feedback: This presentation will discuss methodological challenges and how to asses communication outcomes and challenges related to performing clinical interventions on communication training with nursing staff outside hospitals. We would like to get feed-back on analysis of communication in audio-recordings. Pre assessments in this pilot study started in December 2017 and the education that will be evaluated will run during spring 2018. The study is the first phase in a research project, and after the pilot study there are plans for the educational intervention to be up-scaled in a multicentre study.

## WIP.P.2
## Communication skills training in US Otolaryngology residency programs

**Heather Schopper, University Of Iowa**
**Marcy Rosenbaum, University Of Iowa**

Background: Communication skills are an essential part of medical practice and are one of the six core competencies endorsed by the Accreditation Council for Graduate Medical Education. Despite this, fostering the doctor-patient relationship is stereotypically seen as lower priority in surgical specialties. Little is reported about

how communication skills are taught and fostered in otolaryngology residency, a field that involves many key communication scenarios like surgical planning, shared decision making, and breaking bad news.

Methods: An electronic survey was designed to query whether US otolaryngology residency programs had training in communication skills incorporated into their curricular design for residents. The survey was sent to program directors at the 106 programs and responses are currently being collected.

Preliminary findings: Data is currently being collected.

Preliminary implications of research: The findings in this study will highlight the status of communication skills training in otolaryngology residencies, a field that currently has little to no literature on the topic. The specialty is a unique balance of surgery and medicine, with potential for significant patient morbidity and decades-long follow-up. Given this context, any deficiency in communication skills teaching needs to be addressed.

Request for feedback: The presenter would like feedback on two main topics – survey design and communication skills curriculum building for resident level trainees, particularly in a surgical field. The presenter hopes to use the findings in this study as a foundation to build a pilot communication skills training program at her future residency, with a career goal of working to incorporate more communication skills teaching in otolaryngology.

## WIP.P.3
## Promoting Effective Relationships Between Clinicians and Aboriginal Patients

**Thomas Rolls, Macquarie University**
**Sarah White, Macquarie University**

Background: Australian Aboriginal people face complex health and welfare issues to greater extents than their non-Aboriginal counterparts. Effective healthcare strategies must target individual and community needs. This research aims to deduce how best to establish effective relationships with Aboriginal patients in service delivery.

Methods: Qualitative analysis on structural manifestations of interpersonal relationships from recorded consultations using conversation analysis will be conducted. A literature review was conducted, with 47 articles being identified and screened; 16 were selected for inclusion.

Findings: Patient-clinician separation is profound in Aboriginal healthcare services as a product of cross-cultural disunity and social misunderstandings. This affects the creation and maintenance of an effective clinical partnership, as fundamental to quality healthcare delivery. For quality relationships to occur, clinicians must navigate the biomedical paradigm through which Australia's health services are delivered, with an applied understanding of Aboriginal patients' diverse spiritualties, customs, beliefs and practices. The nature of this relationship as a joint venture requires Aboriginal patients to similarly overcome semantic barriers for the potential to achieve "good health" by western standards. This model for the health consultation often compromises Aboriginal patients' perspective of holistic health. Positive relationships can only be maintained through routine use of reflexive and culturally responsive practices. This is particularly important in developing quality communication protocols, establishing individualised credibility with the patients, demonstrating awareness and sensitivity to issues facing Aboriginal peoples, and maintaining a commitment to education and promotion of Aboriginal health issues.

Implications for Research: There has been research and training on practices in cultural humility for health service delivery to Aboriginal patients. However, there has not been research investigating how interpersonal relationships are co-constructed in these consultations. This research could ascertain whether the relationship quality between doctor and patient is manifested in the consultation, and what practices of conversation are related to the perception of a "good relationship". This could improve future training and assessment, particularly to inform clinician self-awareness and best practice.

Request for Feedback: Feedback on methodological choices for this research will help with project continuation.

## WIP.P.4
## Experience of Nazarbayev University School of Medicine in developing a bilingual survey on Patient satisfaction to assess patient-centered healthcare in Astana, Kazakhstan.

**Alessandra Clementi, Nazarbayev University School Of Medicine**
**Ilya Seleznev, Nazarbayev University School Of Medicine**
**Raushan Alibekova, Nazarbayev University School Of Medicine**
**Massimo Pignatelli, Nazarbayev University School Of Medicine**

Background: In the last twenty years patient feedback has become an essential component of the healthcare service evaluation programs at the national level in several developed countries. Patient evaluation is used by healthcare providers to highlight aspects of care that require improvement and, in a long-term perspective, to monitor quality and performance of provided care. This survey will focus on the patients' experience as a measure of quality of care in Kazakhstan targeting the level of patient centered care and doctor-patient relationship. Present research aims to evaluate the reliability of the utilized survey tool in Russian and Kazakh language, assess patients' experience and analyze the effects of social background.

Methods: About 400 patients at discharge day will be provided with a questionnaire in Nazarbayev University Academic Medical Center, (UMC, University Medical Center Hospitals) in Astana. The survey employed has been adapted from the Picker Institute and validated internationally. The survey includes a total set of 25 items inquiring about patient experience, demographic and social data. Before reaching the target population, to insure fully comprehension of any item, the survey went through a multistep process of translation, cross-cultural adaptation and pretesting on a subset population.

Results: An original 15 item survey developed by Picker institute in English has been translated into two languages: Russian and Kazakh to fit the population background, in fact Kazakhstan is a bilingual country. The research committee evaluated the translated survey and commented on each item to insure cultural adaptation and comprehensibility. At the final stage of the survey adaptation, a pre-test has been submitted to 23 patients inquiring for comprehension feedback and question understanding. Some items difficult to comprehend have been revised and re-edited by the research group to finalize the survey. Currently, over 100 patients have been surveyed.

Significance: The results of this adapted bilingual survey will express patients' experience creating a picture of patient centered care provided by UMC hospitals, highlighting areas of necessary improvement and set the benchmark for the long-term monitoring of healthcare quality.


**WIP.P.5**
**Family Medicine Provider Perspectives on Sexual History Taking during Gynecological Care**

**Ashley Chastain, CUNY Graduate School of Public Health & Health Policy**
**Emmeline Rodriguez, CUNY Graduate School of Public Health & Health Policy**
**Rachel Rosenberg, The Institute for Family Health**
**Gabrielle Surick, The Institute for Family Health**
**Christine Chang, The Institute for Family Health**
**Betty Wolder Levin, CUNY Graduate School of Public Health & Health Policy**


Background: In the context of HIV/STI prevention, testing and treatment, healthcare providers are encouraged to conduct sexual risk assessments and ask patients about their sexual histories. Particularly for female patients, sexual history taking helps identify the presence of STIs, sexual anxiety, sexual dysfunction, and IPV. However, previous studies indicate the frequency of sexual history taking varies widely during medical exams, suggesting more research is needed to better understand patient-provider communication about sexual health. Here, we will explore family medicine provider perspectives on sexual history taking in the context of gynecological care, and what social, intrapersonal, and structural factors may influence sexual health discussions.

Methods: We will conduct in-depth interviews with 12 family medicine providers who regularly provide gynecological care at two federally-qualified health centers in a large, diverse, urban area in the US. Through interviews, we will explore provider perspectives on sexual health discussions, and how they think about and describe sexual health concepts during medical exams and in every-day life. Interviews will be transcribed, and thematically analyzed via the constant comparative method, as part of a larger study which includes female patient interviews.

Preliminary findings: Eight provider interviews have been conducted. In these interviews, sexual health concepts were often described in a protection or risk-based framework, with particular emphasis on STI and pregnancy prevention. IPV and sexual dysfunction were mentioned as important topics for discussion with female patients, but time, perceived stigma and perceived resource constraints were identified as barriers. Providers described wide-ranging sexual health discussions outside the medical environment, and with their own medical providers. However, specific topics were named as difficult to discuss in their personal lives, and were similarly challenging to raise with their own patients. Data collection will be completed by March 2018.

Implications:  Study findings will enhance our understanding of how providers and patients communicate about sexual health, with the goal of improving future discussions during gynecological care encounters.

Request for feedback:  While this study is US-based, there are likely similarities world-wide in provider perspectives regarding sexual history taking. Receiving international, interdisciplinary feedback will help inform my analysis of factors influencing sexual health discussions.

## WIP.P.6
## Effective Best Practice Strategies for Shared Decision-Making with Internet-informed Cancer Patients

### Simone Jaeger, University of Erfurt

Background: Patients increasingly seek health information on the Internet prior to the consultation to better cope with diseases and treatments, and this trend is growing rapidly. The Internet gains special meaning for treatment decision-making in chronic conditions like cancer as it offers a flood of information on therapies, their side effects and success rates. Internet-informed patients often confront their physicians with their search results, including the online information and related expectations. Doctor-patient communication plays a central role in health care, especially in terms of improving patient involvement across the cancer control continuum. Different studies indicate that good communication should be appreciated as part of the treatment since it fosters the doctor-patient relationship and positively impacts health outcomes (cf. Dean & Street, 2015; Epstein & Street, 2007; Roter, 2000; Roter & Hall, 2006; Street, Makoul, Arora, & Epstein, 2009; Street, 2013).

This study looks into effective patient-centered communication in this setting and is guided by the following research questions: (1) Which communicative strategies for treatment-leading doctors are considered best practice from the expert patient and provider perspectives? (2) In which way is the best practice communication to be confirmed via patient's reported involvement and experienced shared decision-making? (3) How does this result in patients' outcomes--satisfaction with the treatment decision and resulting well-being, trust in the physician and related uncertainty management, motivation for the treatment plan and connected compliance? (4) Which communicative strategies work best with which types of Internet-informed cancer patients and under which patient-specific conditions?

Methods: Comparing the two perspectives of the medical interaction for breast, prostate and colon cancer as the most prevalent types in a two-step process: first, a Delphi survey (starting in February) with healthcare providers in the tumorboards and patients' representatives and second, an online survey with cancer patients, both online and nationwide in Germany.

Preliminary implications of research: The study is supposed to reveal effective best practice strategies which can be implemented in medical guidelines for the face-to-face consultation.

Request for feedback: Is SEM or moderator/mediator models the better fit here?

## WIP.P.7
## The Effect of Messaging Framing on Minority Recruitment in Pharmacogenomics Research

### Sanjana Ramesh, Northwestern University
### Courtney Scherr, Northwestern University

Background: The primary objective of this study is to increase enrollment of African Americans in pharmacogenomic (PGX) studies, which explore associations between genetic markers and drug metabolism. We are conducting a randomized pilot study using actual PGX study recruitment letters to test variations in message framing based on known barriers and facilitators to clinical trial participation among African Americans. The guiding research question is: Which message frames are likely to promote interest in participation in a pharmacogenomics study among African Americans?

Methods: Based on a literature review, we identified fear and mistrust as a potential barrier, and altruism and inclusion of minorities as potential facilitators. We will conduct focus groups with African Americans who were approached to participate in a PGX study, to confirm key barriers and facilitators to participation. Based on focus group results, we will create PGX study recruitment letters with various message frame manipulations. Using a blind random control trial approach, we will test the letters to determine if specific message frames resulted in higher study interest.

Preliminary findings: Not available at this time: Preliminary implications of research: Disparities in PGX exist due to longstanding difficulties recruiting minority patients. Message framing has been found to affect interest in, and ultimately recruitment of minority patients to PGX studies. Ensuing participation of minorities in PGX is critically important to preventing the exacerbation of disparities as Precision Medicine efforts continue to grow. Specifically, this research will allow for better recruitment into the ACCOUNT study, which specifically explores PGX discovery and translation in African American patients.

Request for feedback: How have other investigators developed message variations when testing message frames? Can you share any challenges or pitfalls that you have encountered? What are the best methods to obtain feedback when testing the 6-8 recruitment letter variations?

## WIP.P.8
## "I'm Pretty Sure All Hell Will Break Loose": A Qualitative Analysis of Patients' and Family Surrogate Decision Makers' Conversations about Critical Care Decision-Making

### Jennifer Freytag, TEXAS A&M UNIVERSITY

Purpose: This qualitative study was designed to help understand the way patients and their surrogate decision makers think about the process of making decisions about the patient's critical care.

Methods: Individuals over 60 ("patients") who were present at local senior centers were asked to participate in an interview with a family member who is likely to serve as their surrogate healthcare decision maker ("surrogate") for their critical care when the patient is not able to do so (n=20). The interview included an independent exercise in which patient and surrogate read a hypothetical feeding tube scenario and answered questions about how they expected critical care decisions to be made. Then, the patient and surrogate together were guided through a conversation about what they think is important in healthcare decision making. Thematic coding and analysis was used to pinpoint key ideas in both individual responses and the conversation.

Results: Several key themes emerged from an analysis of interview transcripts. In the independent exercise, patients and surrogates spoke frankly about anticipating family conflicts in decision-making. These conflicts often included a family member who would be the "difficult one," someone who might undermine or challenge decisions made by the surrogate. In the individual interviews, patients and surrogates also identified barriers to open family communication during the decision-making process, including differing religious beliefs, attitudes toward pain, and cultural backgrounds.

In the conversation portion of the interview, some patients and surrogates discussed the conflicts and barriers to family decision making in critical care. In these conversations, patients and surrogates discussed strategies for overcoming these barriers, including excluding some family members from the decision-making process and talking with these family members before the patient's health issues become serious. Patients and surrogates who discussed these issues reported feeling more at ease with handling the difficult decision-making that occurs in critical care.

Conclusions: The results suggest that another approach to talking with patients and surrogates about critical care decisions is to give equal if not more focus to the family decision-making process—how to deal with the "difficult one" and family barriers to making these decisions.

## WIP.P.9
## Patient and Family Decision Making for Elective Continence Surgeries in Patients with Myelomeningocele

### Jorge Whitley, Seattle Children's Hospital
### Kathleen Kieran, Seattle Children's Hospital

Many children with myelomeningocele (MMC) have bladder and bowel dysfunction, which can result in damage to the kidneys and problems with urinary and/or fecal retention or incontinence. Surgical intervention has been successful in helping some children with MMC achieve continence. However, these surgeries are complex anatomically, may have prolonged convalescence periods, and may have complications necessitating another surgery and/or generating temporary or permanent morbidity. Although the medical rationale for these reconstructive surgeries has been well explored, the parent/child perspective on when (or if) to perform these

surgeries is not well studied. In particular, the factors influencing the decision to pursue or not pursue surgery are not well described in this population. These findings are useful to provide patient-centered care and also to begin to explore apparent disparities in the utilization of surgical intervention in various populations (e.g. children in rural versus urban areas).

This is a mixed methods study in which parents of children with MMC will be surveyed on their goals for care as well as their opinions and values regarding surgical intervention for continence (at present and in the past or the future). We will also hold focus groups to gather qualitative data from participants in such a way that they can elaborate on their concerns and priorities. All parents of children with MMC (approximately 500 patients) at our freestanding children's hospital will be invited to participate. Professional interpreters will be available for participants with limited English proficiency. Data will be collected on patient demographics, surgical interventions to date, and characteristics of each surgery (e.g. length of stay, complications). Descriptive quantitative data will be analyzed using measures of central tendency.

The study team is requesting assistance with two specific questions: 1) Maximizing diversity of participating families, particularly across all socioeconomic strata and various preferred languages of care; 2) Optimizing qualitative data collection and analysis in a geographically, socioeconomically, and ethnically diverse population.

## WIP.P.10
## Assessment of Patient-Centeredness through Patient-Reported Experience Measures – A Study Protocol

**Stefan Zeh, Department Of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Eva Christalle, Department Of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Pola Hahlweg, Department Of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Isabelle Scholl, Department Of Medical Psychology, University Medical Center Hamburg-Eppendorf**

Background: Patient-centeredness became increasingly important in health care research and in health policy. To overcome inconsistencies in the definition of patient-centeredness, an integrative model from experts' perspective including 15 dimensions was developed. But currently, it is still unclear how patients value these dimensions and there still lacks a sound measure to assess patient-centeredness in German. Thus, the aims of this study are: (1) to assess content and relevance of dimensions of patientcenteredness from patients' perspective, (2) to develop and psychometrically test a core set of patientreported experience measures (PREM) and (3) to investigate the feasibility of implementation in routine health care.

Methods: A prospective mixed-methods approach will be used. The study will target patients from different chronic disease groups (cancer, cardiovascular diseases, mental disorder, and musculoskeletal disorders). In Phase 1, patients' perspectives on dimensions of patient-centeredness will be assessed using a Delphi study (N=200). In Phase 2, the core set of measures will be developed (with several steps of stakeholder involvement, including several rounds of cognitive interviews with patients) and psychometrically tested in a large patient sample (N=2,000). In Phase 3, the use of the developed measure in routine care will be assessed with a subsequent national expert workshop held to discuss ways of implementation.

Preliminary findings: At the conference, results from cognitive interviews and the Delphi study will be presented.

Preliminary implications of research: The main result of this study will be a consistent PREM core set assessing patient-centeredness in German language. The results will certainly also be of international interest, as the use of PREM to assess patient-centeredness has received relatively little attention in other countries. The resulting PREM core set can be used as a performance, benchmarking or quality improvement measure. The last project phase will generate important insights into how to best implement the developed PREM core set into routine practice.

## WIP.P.11
## "I want to talk about my sex life with my doctor" – patient's expectations and experience on physician's communication about sexual health

**Andreia Silva, University of Porto. Medical Psychology Unit, Dep Clinical Neurosciences and Mental Health**
**Carla Rodrigues, Centro de Saúde São Neutel**
**Margarida Figueiredo-Braga, Faculty of Medicine, University of Porto. Medical Psychology Unit, Dep Clinical Neurosciences and Mental Health**

Background: Family physicians have a key role in communicating with their patients about sexuality and sexual difficulties. The vast majority of patients have sexual concerns, and would like their physician to ask them questions regarding their sexual history in order to receive advice on prevention. Nevertheless, only a smaller percentage reported ever discussed their sexual life with a physician. The aim of this study is to identify patient's expectations and experience when communicating about sexuality with their physicians. We hypothesize that patients usually do not discuss their sexual life with their physicians, but they wish this topic is addressed during consultations.

Methods: The study has a cross-sectional observational design. Self-administrated questionnaires written in the native language will be applied to adult patients, attending Health Care Center consultations. Confidentiality and anonymity are assured; the study was approved by the Ethical Committee. Assessment include sociodemographic characterization and patient-physician communication using the Quality of Communication through the Patient's Eyes (QUOTE-COMM). An original questionnaire evaluates patient's expectations and patient's experience regarding sexual history taking by their family physicians. The results will be submitted to a descriptive statistical analysis with SPSS©v23. For a complementary qualitative approach interviews will be collected and analyzed to explore themes, and identify relationships and differences. The NVivo system will be used to descriptive and explanatory analysis.

Preliminary implications of research: Knowledge on the Portuguese reality is missing on if and how patient's wish to engage in communication about their sexual health with physicians. The collected information regarding previous experience may produce recommendations for patient-physician's communication and improve clinical practice.

Request for feedback We expect difficulties in response rate, and suggestions on how to overcame patient embarrassment about sexual topics will be helpful. Low literacy, gender disparities and age are expected difficulties in data collection, to be discussed with the audience. Although confidentiality will be assured, social desirability may impinge the results. Discussion and suggestions of more effective questions and advice on number of interviews and topics would be used to merge efficiently the quantitative and qualitative approaches.

# Parallel Session 4

## Oral Presentations

**O.15.1**
**Identifying and responding to anxiety and depression in adult cancer patients: Pilot testing of an on-line communication skills education program targeting challenging conversations for oncology health professionals**

Joanne Shaw, Psycho-oncology Co-operative Research Group (PoCoG), School of Psychology
Jessica Cuddy, Psycho-oncology Co-operative Research Group (PoCoG), School of Psychology
Brian Kelly, School of Medicine and Public Health, University of Newcastle
Toni Lindsay, Chris O'Brien Lifehouse
Peter Grimison, Chris O'Brien Lifehouse
Tim Shaw, Workforce Education & Development Group (WEDG), Faculty of Health Sciences
Heather Shepherd, Psycho-oncology Co-operative Research Group (PoCoG), School of Psychology
Phyllis Butow, Psycho-oncology Co-operative Research Group (PoCoG), School of Psychology

Introduction: The Psycho-oncology Co-operative Research Group (PoCoG) developed an evidence-based clinical pathway for the identification and management of anxiety/ depression in adult cancer patients to promote standardization in assessing and responding to affected patients and enhance uptake of psychosocial interventions. A key component to support implementation of the pathway into routine clinical practice is health professional training to facilitate effective communication. The aim of this research was to determine the acceptability of an interactive on-line education program to increase health professionals' knowledge, and improve skills and confidence in communicating about anxiety and depression screening and referral.

Methods: 12 oncology nurses participated in a pre-post simulation study. Nurses participated in 3 pre-training standardised medical simulations with an actor/patient to (1) introduce screening to a patient; (2) discuss referral to psychological support; and (3) manage a patient who refuses referral to psychological support. Participants then completed 5 on-line training modules. 3 weeks later nurses participated in 3 post-training medical simulations. Self-reported acceptability of the training and communication confidence related to screening and referral, and communication were assessed by two independent reviewers using a study specific analysis framework.

Results: Online training is acceptable oncology nurses. Confidence in discussing anxiety and depression as well as screening and referral increased post training. Overall communication improved for all participants. Communication scores increased from pre-post training for all participants, although only communication related to making a referral reached statistical significance.

Conclusions: Building workforce skills, knowledge and confidence is crucial for the successful implementation of routine screening in busy cancer settings. This interactive on-line training was acceptable and effective in improving communication.

**O.15.2**
**Impact of tailored e-learning to improve nurses' smoking cessation counseling guideline adherence**

Dennis de Ruijter, Department of Health Promotion, Care and Public Health Research Institute , Maastricht University
Eline Smit, Department of Communication Science, Amsterdam School of Communication Research (ASCoR), University of Amsterdam
Hein de Vries, Department of Health Promotion, Care and Public Health Research Institute (CAPHRI), Maastricht University
Ciska Hoving, Department of Health Promotion, Care and Public Health Research Institute (CAPHRI), Maastricht University

Background: A novel computer-tailored e-learning program proved successful in promoting practice nurse adherence to evidence-based smoking cessation counseling guidelines. To determine the public health impact of the e-learning program, we subsequently explored the program's (cost-)effectiveness on patient quit success.

Methods: In a randomized trial, 396 smoking patients were recruited and counseled by 221 Dutch practice nurses. Smokers counseled by intervention group nurses with access to the e-learning program for six months were compared to smokers counseled by control group nurses without program access. Continued and 7-day point prevalence abstinence was measured at 6 and 12 month follow-up; participants who dropped out were considered to smoke at follow-up. Costs were explored from a healthcare perspective, including smokers' healthcare costs and PN costs related to time spent on counseling. Data on costs and smokers' continued abstinence were used to calculate an Incremental Cost-Effectiveness Ratio (ICER).

Findings: At 6 and 12 months, 239 (60.4%) and 201 (50.8%) smokers completed the follow-up questionnaire, respectively. After six months, smokers counseled by intervention group nurses were more likely to be abstinent than those counseled by control group nurses; continued abstinence was 25.5% vs. 21.1%, and 7-day point prevalence abstinence was 31.5% vs. 27.2%. At 12 months, results remained in favor of the intervention group smokers (continued abstinence 22.6% vs. 22.2%, 7-day point prevalence abstinence 27.7% vs. 25.6%, all differences p>.05). Calculation of the ICER demonstrated that it would cost €7,126 for each additional smoker to be abstinent after 6 months. When only smoker healthcare costs were considered it would cost €6,858 per abstinent smoker.

Discussion: The practice nurse e-learning program resulted in increased guideline adherence, but not in significantly higher smoking abstinence among counseled smokers. However, the e-learning program seems to be cost-effective, as costs for smokers only and smokers and practice nurses combined were both well below the Dutch threshold of willingness to pay for preventive interventions (€18,000/individual). A sustainable infrastructure to support national program implementation should therefore be developed.


## O.15.3
## Patient-practitioner-computer communication – the e-SEGUE as a standardized assessment tool

Dilermando Sobral, Faculty of Medicine - University of Porto
Margarida Figueiredo-Braga, Faculty of Medicine - University of Porto

Background: Computers and Electronic Health Records (EHRs) are being increasingly used in healthcare organizations, and in primary care settings in particular. This new digital communication resources are drifting the patient-physician encounter to a patient-physician-computer relationship, potentially threatened the traditional therapeutic link between patient and physician. Guidelines on communication skills need to incorporate specific strategies regarding HER and computer use in physician's interaction with patients. The e-SEGUE, integrating computer-related communication skills in the existing SEGUE communication assessment framework, evaluates 23 patient-doctor-computer communication-related behaviors for communication assessment in computerized settings. The present work describes the adaptation and validation of the Portuguese version of the e-SEGUE.

Methods: Using the original validation methodology, the cross-cultural adaptation process consisted in the translation by two evaluators, discussion and development of a final version, which also integrated the comments of the participants of a pilot study. Data were collected through paper-based and digital questionnaire.

Findings: A sample of 535 participants was assembled, divided in two subgroups: an expert panel (teachers and postgraduate students) and a non-expert panel (medical students, family physicians and nurse practitioners). They all rated the relevance of each of the behaviors of the e-SEGUE for establishing an effective physician-patient communication while using the computer. The Cronbach's alpha coefficient was 0.84 for the expert panel and 0.82 for the non-expert panel. Only two items were rated under 50% of agreement. Medical students reported a higher level of agreement in the item "Read back what you have written" than the total sample. Family physicians presented similar results as the members of the expert panel (n=27).

Discussion: Health professionals with different levels of expertise and experience value the use of specific skills to integrate computer and EHR in clinical practice, in order to foster patient's active involvement and prevent its negative impact in patient-physician communication.

The Portuguese version of the e-SEGUE seems to be a valid and reliable tool for assessing patient-doctor communication in a computerized setting, applicable in teaching and research.


## O.15.4
## Power to the patient? The influence of health information through the Web on the power balance between patient and general practitioner (GP)

**Edgard Eeckman, Free University Of Brussels**

Web health information is stated to convert the asymmetric power balance between patient and medical doctor. Is it or is the influence of the Web on the power balance overestimated? To analyse the patient-GP relationship, this study applies the resource dependency theory. This theory defines social power over actor B by actor A as the dependence of actor B on the resources of actor A. The dependence on a resource is influenced in a direct way by the value and the availability of the resource for actor B and by the concepts of perceived risk, uncertainty, perceived severity and trust, and in an indirect way by the charisma and legitimate authority of actor A. A social relationship is mostly a matter of mutual dependence and a matter of balancing operations. In a situation of balanced mutual dependence, the intentions of both actors may be fulfilled. Each actor has ways to resist his dependence and the exertion of power can come with a cost. Dependence resources and resistance on the macro, meso and micro level are considered. A mixed research method is applied consisting of an online survey for patients and non-patients, analysis of 24 patient-GP video-recorded consultations, ethnographic follow-up interviews with the patients and the GPs participating in the observations, 3 focus groups with patients and non-patients and 2 discussions with groups of GPs. The results suggest that the Web has the potential to narrow but not to bridge the information and knowledge gap between patient and GP. But health information is only one of the resources of dependence of a patient and the patient's dependence on other important resources of the GP remains. Despite health information through the Web the patient-GP relationship remains asymmetric. Health information through the Web mainly seems to influence the communication between patient and GP. For the patient-GP power relationship to be balanced, all resources of dependence must be considered, also those on the meso and macro level. Patient empowerment is a valuable concept, but health information through the Web is not a silver bullet to achieve it.

## O.15.5
**Searching for answers in depression – A survey on the perceived patients' information seeking practices**

**Hugo Almeida, Hospital Magalhães Lemos, EPE**
**Ana Almeida, Department of Communication and Art, University of Aveiro**
**Margarida Figueiredo-Braga, University of Porto, Department of Clinical Neurosciences and Mental Health Faculty of Medicine**

Background: The use of digital media to help patients cope with depression has been reported in several studies. The actual use of this resources in the decision-making process is less understood. This study focuses on the physician's perception on the use of information resources by depressed patients.

Methods: We used a convenience sample of 143 physicians (94 PCP and 49 PSY). An original questionnaire was built to assess socio-demographic and professional characteristics, digital literacy (access to digital media, use of digital media) and perspectives on the use of digital media in patient- physician communication. A Likert scale ranging from "never" to "everyday" was used. Statistical analysis was performed using IBM® SPSS® Statistics v2.2. Descriptive statistics were used, and correlational analysis were performed with the Pearson Correlation Test.

Findings: Physicians were predominantly (75.8%) female with a mean age of 37.3 (SD12.4) and 10.6 years (SD12.24) of clinical practice. Physicians perceive the use of social contacts and the media as major sources of information about depression by patients (very often and always in 81.9% and 76.6%), with the use of health professionals or active online search as secondary resources. PCP and those with more clinical experience (>5 years) report lower use of online blogs and social networks ($p<0.001$ and $p<0.001$), but assign greater importance to those platforms as informative resources ($p=0.013$ and $p<0.05$). Accordingly, clinical experience was positively correlated with the perception of blog and social network use by the patients ($\rho=0.16$; $p=0.048$).

Discussion: Physicians in our sample underappreciate the use of digital resources as information resources by depressed patients, concerning their disorder. Those with higher use of social networks disregard them as possible information resources, valuing patients' personal contacts and the social media as more influential. With the enhancement of digital literacy and easy access to resources with varying degrees of scientific accuracy, and the known importance of information in depressed patients, offering new and reliable resources is paramount. Further research on information seeking practices and preferences shall help to build better aids for decision-making processes in depressed patients.

## O.16.1
## Addressing health literacy and numeracy in cancer-related genetic communication studies

**Kimberly Kaphingst, Dept of Communication, University Of Utah**
**Wen-Ying Chou, National Cancer Institute**
**Emily Peterson, National Cancer Institute**
**Jingsong Zhao, Huntsman Cancer Institute**
**Ashley Elrick, Dept of Communication, University Of Utah**
**Soo Jung Hong, Huntsman Cancer Institute**
**Chelsea Ratcliff, Dept of Communication, University Of Utah**

Background: Effective patient-provider communication is needed to successfully translate genetic information into patient-centered cancer care. Patients' and providers' health-related knowledge and skills, or their health literacy and numeracy, play a critical role in this communication. However, no prior reviews have examined how health literacy and numeracy have been addressed in the genetic communication literature.

Methods: We conducted a comprehensive scoping review to synthesize recent published research (2010-2017) on communication of cancer-related genetic and genomic information. Searches in six databases resulted in 9,251 unique records; 518 papers were included. Here we examined whether and how these communication studies addressed health literacy or numeracy.

Results: Few papers addressed health literacy (n=12; 2.4%) or numeracy (n=21; 4.2%). Of the ten papers that included a health literacy measure, seven used subjective screener items and three used an objective word recognition measure (i.e., REALM-R). Two papers did not assess health literacy; one mentioned health literacy principles and one had a qualitative health literacy theme. The majority of papers (n=9) that had health literacy measures examined associations between patients' health literacy and various outcomes including knowledge gains, interpretation, and perceived understanding of genetic risk information; genetics-related beliefs and self-efficacy; and communication of results to others. All papers addressing numeracy included objective and/or subjective measures. The most common (n=11) was an objective, non-health-related 3-item measure. Most papers addressing numeracy (n=19) examined relationships between patients' numeracy and outcomes including awareness of genetic testing; genetics-related knowledge and beliefs; recall, perceived understanding, and interpretation of genetic risk information; interest and willingness to pay for genetic testing; and surgical intentions. In two papers, numeracy was presented only as a participant characteristic.

Discussion: This synthesis found that few recent communication studies on cancer-related genetic and genomic information addressed health literacy or numeracy. While some papers examined how these variables related to patients' processing of genetic risk information or prior knowledge and beliefs, few studies focused on any one outcome. Further research is needed to examine how health literacy and numeracy may affect the outcomes of communication processes and moderate the impact of genetic communication interventions.

## O.16.2
## Health literacy (HL) and health care services´ HL-responsiveness as perceived by information seeking cancer patients. A survey of users of the German cancer information service

**Andrea Gaisser, German Cancer Research Center**
**Eva Maria Bitzer, University of Education**
**Susanne Weg-Remers, German Cancer Research Center**
**Evelyn Kludt, German Cancer Research Center**

Background: Health literacy (HL) is the ability to find, understand, assess and apply health information, and an important asset that facilitates patients´ participation in health-related decisions. The publicly funded German cancer information service (CIS) provides evidence-based, client-centered information to support HL and patient participation. Being a health literate organization, the CIS is interested in its clients' HL and their perception of information and communication provided by oncology health care professionals (OHCP).

Methods: From June to December 2017, consecutive patients who contacted the CIS email service received an access link to an online questionnaire along with the CIS answer to their inquiry. The survey used a set of 11 items from the HLS-GER (Schaeffer et al. 2017) related to health care and a validated 9-item questionnaire on HL-responsive communication in health care services (HL-COM; Ernstmann et al. 2017). Additionally, we captured socio-demographics, cancer type and stage, and setting of care. Descriptive analyses were performed with SPSS-V25.

Findings: The analysis includes 212 completed questionnaires (return rate 35%; 60% female gender; median age 62, education level above population-based figures). Most participants were during or shortly after primary treatment. They reported more difficulties with assessing and processing compared to finding and understanding of health information. They scored lower for the HLS-GER health care items than the general population. Ratings of HL-responsive communication of OHCP were poor: mean 2,7 (95% CI 2,5 to 2,8) on a scale from 1 (full disagreement) to 4 (full agreement), and worse compared to the validation sample of the HL-COM (3,3; p<0,001). General health care-related HL and perceived HL-responsive OHCP communication correlate 0.5.

Discussion: We provide real-life data from information seeking patients on their HL and perceived HL responsiveness of cancer care. As the survey sample includes patients with rather high education level, the low scores found for general HL found here indicate a health care system that makes it difficult for patients to act health literate. This is underscored by the low ratings of OHCP HL-responsiveness. There is a need to improve communication and information in health/cancer care to foster patients´ HL and chances to participate in health decisions.

## O.16.3
## Health literacy and 1-year mortality: Mechanisms of association in a prospective cohort of adults hospitalized for cardiovascular disease

**Lindsay Mayberry, Vanderbilt University Medical Center**
**Jonathan Schildcrout, Vanderbilt University Medical Center**
**Kenneth Wallston, Vanderbilt University Medical Center**
**Kathryn Goggins, Vanderbilt University Medical Center**
**Amanda Mixon, Vanderbilt University Medical Center**
**Russell Rothman, Vanderbilt University Medical Center**
**Sunil Kripalani, Vanderbilt University Medical Center**

Background: Several cohort studies have linked lower health literacy (HL) with increased mortality, particularly in adults with cardiovascular disease (CVD). Understanding how and why low HL increases mortality risk can inform development and targeting of interventions. Therefore, we tested previously theorized social, behavioral, and medical mediators of HL effects on mortality.

Methods: The Vanderbilt Inpatient Cohort Study was a prospective cohort study of 3,000 adult patients admitted to the hospital for acute coronary syndrome or heart failure. **Mortality data were gathered for ≥12 months using** information from multiple sources. The predictor was HL, a latent variable with four indicators (objective and subjective HL, numeracy and education). Outcome was a dichotomous indicator of 1-year mortality after discharge. Hypothesized mediators were social and behavioral factors (social support, health competence, and health behaviors index), and medical factors (comorbidity index, acute coronary syndrome vs. heart failure, and prior year hospitalizations). Covariates were age, gender, race/ethnicity, and socioeconomic status. We examined a multiple mediator model with bootstrapping to identify indirect effects and average partial effects for interpretation on the probability scale. Results are presented as adjusted odds ratios (AOR) and absolute difference in probability.

Results: Participants were 60% male, mean 61 (SD 13) years, and 83% non-Hispanic White; 63% were hospitalized for acute coronary syndromes and 37% for acute decompensated heart failure. Ten percent died within 1 year of hospital discharge. Lower HL predicted 1-year mortality (total effect AOR=1.31 [1.01, 1.69]). Health competence, health behaviors, and medical factors independently contributed to the indirect effect (AOR=1.49 [1.35, 1.67]), but social support did not. On average, the probability of 1-year mortality increased by 3.2 percentage points (absolute difference) for each SD decrease in HL. When holding all covariates and mediators constant, HL no longer predicted mortality (direct effect AOR=0.87 [0.66, 1.14]), but older age (10 year interval, AOR=1.30, $p<0.001$) and lower socioeconomic status (AOR=1.23, $p=0.02$) did.

Conclusions: Lower HL had a substantial indirect effect on 1-year mortality via behavioral and medical factors. Interventions targeting health competence and health behaviors among patients with low HL have the potential to reduce mortality after hospitalization for CVD.

## O.16.4
## Health Literacy and Risk of Cognitive Impairment among Older Adults

**Laura Curtis, Northwestern University**
**Rachel O'Conor, Northwestern University**

**Julia Yoshino Benavente, Northwestern University**
**Marina Arvanitis, Northwestern University**
**Michael Wolf, Northwestern University**

Background: Our objective was to determine the prevalence of a new diagnosis of cognitive impairment among an ongoing cohort of older primary care patients. We specifically examined whether older adults with limited health literacy at baseline were at greater risk of cognitive impairment.

Methods: 624 adults between the ages of 55 and 74 were recruited from an ambulatory care clinic in Chicago. Structured interviews were conducted between 2008 and 2010 and participants were followed every 2.5-5 years until present. Health literacy was measured using the Newest Vital Sign (NVS) at baseline. Diagnoses for dementia, mild cognitive impairment (MCI), and memory problems from enrollment date through December 2017 were extracted from participants' medical charts. Fisher's exact tests were used to compare any impairment (yes/no) and dementia diagnosis (yes/no) by health literacy categories. Multivariable regression models were run for each outcome, adjusting for age, gender, education, and time in the study.

Results: Participants were 70% female, 27.8% African American, 64.0% White, had a mean (SD) age of 63.4 (5.5) and mean follow-up time of 8.3 (0.5) years. A new diagnosis of cognitive impairment was evident in 12.5% of the sample: 3.7% dementia, 1.3% MCI, and 7.5% memory issues. Prevalence of any cognitive impairment varied by health literacy levels (19.3% limited, 15.8% possibly limited, and 9.2% adequate, p=0.01). Prevalence of a new dementia diagnosis also varied with 8.3% of those with limited, 4.1% possibly limited, and 2.2% adequate literacy (p=0.01). In multivariable models, health literacy and age were independently associated with both outcomes. Participants with limited health literacy were more likely to receive any diagnosis (RR 1.83, 95% CI (1.02 – 3.27)) and specifically a dementia diagnosis (RR 3.09, 95% CI (1.06 – 8.99)) compared to those with adequate literacy.

Conclusions: Among this diverse sample of older primary care patients, baseline health literacy skills was a significant predictor of developing cognitive impairment. While this underscores the increasing evidence of the link between health literacy skills and cognitive function, it will be important to differentiate problems related to low health literacy versus cognitive impairment in order to properly remediate these issues.

Unadjusted comparisons - 3 category HL variables

| | | Cognitive impairment | | | | Any Impairment | Dementia |
|---|---|---|---|---|---|---|---|
| | | None | Memory/ MCI | Dementia | Pval | Pval | pval |
| Overall | N=624 | 546 (87.5) | 55* (8.8) | 23 (3.7) | | 78 (12.5) | 23 (3.7) |
| TOFHLA, n(%) | | | | | 0.03 | 0.10 | 0.01 |
| Low | 29 (4.7) | 25 (86.2) | 1 (3.5) | 3 (10.3) | | 4 (13.8) | 3 (10.3) |
| Marginal | 79 (12.9) | 63 (79.7) | 10 (12.7) | 6 (7.6) | | 16 (20.3) | 6 (7.6) |
| Adequate | 507 (82.4) | 449 (88.6) | 44 (8.7) | 14 (2.8) | | 58 (11.4) | 14 (2.8) |
| NVS, n(%) | | | | | 0.01 | 0.01 | 0.01 |
| Low | 109 (17.5) | 88 (80.7) | 12 (11.0) | 9 (8.3) | | 21 (19.3) | 9 (8.3) |
| Marginal | 146 (23.4) | 123 (84.5) | 17 (11.6) | 6 (4.1) | | 23 (15.8) | 6 (4.1) |
| Adequate | 368 (17.5) | 334 (90.8) | 26 (7.1) | 8 (2.2) | | 34 (9.2) | 8 (2.2) |
| REALM, n(%) | | | | | 0.18 | 0.09 | 0.36 |
| Low | 19 (3.1) | 17 (89.5) | 1 (5.3) | 1 (5.3) | | 2 (10.5) | 1 (5.3) |
| Marginal | 73 (11.8) | 58 (79.5) | 11 (15.1) | 4 (5.5) | | 15 (20.6) | 4 (5.5) |
| Adequate | 529 (85.2) | 468 (88.5) | 43 (8.1) | 18 (3.4) | | 61 (11.5) | 18 (3.4) |
| MMSE, n(%) | | | | | 0.02 | 0.05 | 0.01 |
| Severe | 1 (0.2) | 0 (0.0) | 0 (0.0) | 1 (100.0) | | 1 (100.0) | 1 (100.0) |
| Mild | 9 (1.4) | 7 (77.8) | 1 (11.1) | 1 (11.1) | | 2 (22.0) | 1 (11.1) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| None | 614 (98.4) | 539 (87.8) | 54 (8.8) | 21 (3.4) | | 75 (12.2) | 21 (3.4) |

*n=8 with MCI

All pvalues **from Fisher's exact tests**

Unadjusted comparisons -2 category HL variables

| | | Cognitive impairment | | | | Any Impairment | | Dementia | |
|---|---|---|---|---|---|---|---|---|---|
| | | None | Memory/ MCI | Dementia | Pval | | Pval | | pval |
| Overall | N=624 | 546 (87.5) | 55* (8.8) | 23 (3.7) | | 78 (12.5) | | 23 (3.7) | |
| TOFHLA, n(%) | | | | | 0.03 | | 0.04 | | 0.01 |
| Limited | 110 (17.8) | 90 (81.8) | 11 (10.0) | 9 (8.2) | | 20 (18.2) | | 9 (8.2) | |
| Adequate | 507 (82.4) | 449 (88.6) | 44 (8.7) | 14 (2.8) | | 58 (11.4) | | 14 (2.8) | |
| NVS, n(%) | | | | | 0.01 | | 0.004 | | 0.02 |
| Limited | 255 (40.9) | 211 (82.8) | 29 (11.4) | 15 (5.9) | | 44 (17.3) | | 15 (5.9) | |
| Adequate | 368 (17.5) | 334 (90.8) | 26 (7.1) | 8 (2.2) | | 34 (9.2) | | 8 (2.2) | |
| REALM, n(%) | | | | | 0.15 | | 0.09 | | 0.25 |
| Limited | 92 (14.8) | 75 (81.5) | 12 (13.0) | 5 (5.4) | | 17 (18.5) | | 5 (5.4) | |
| Adequate | 529 (85.2) | 468 (88.5) | 43 (8.1) | 18 (3.4) | | 61 (11.5) | | 18 (3.4) | |
| MMSE, n(%) | | | | | <0.05 | | 0.12 | | <0.05 |
| Mild/severe | 10 (1.6) | 7 (70.0) | 1 (10.0) | 2 (20.0) | | 3 (30.0) | | 2 (20.0) | |
| None | 614 (98.4) | 539 (87.8) | 54 (8.8) | 21 (3.4) | | 75 (12.2) | | 21 (3.4) | |

*n=8 with MCI

**All pvalues from Fisher's exact tests**

Unadjusted comparisons – demographic variables & Cog imp

| | | Cognitive impairment | | | | Any Impairment | | Dementia | |
|---|---|---|---|---|---|---|---|---|---|
| | | None | Memory/ MCI | Dementia | Pval | | Pval | | pval |
| Overall | N=624 | 546 (87.5) | 55* (8.8) | 23 (3.7) | | 78 (12.5) | | 23 (3.7) | |
| Age3, n(%) | | | | | <0.001 | | <0.001 | | 0.003 |
| 55-59 | 186 (29.8) | 93.0 | 6.5 | 0.5 | | 7.0 | | 0.5 | |
| 60-64 | 188 (30.1) | 91.5 | 5.3 | 3.2 | | 8.5 | | 3.2 | |
| 65+ | 250 (40.6) | 80.4 | 13.2 | 6.4 | | 19.6 | | 6.4 | |

| | n(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Agecat3, n(%) | | | | | <0.001 | | <0.001 | | 0.01 |
| 55-64 | 374 (59.9) | 92.2 | 5.9 | 1.9 | | 7.8 | | 1.9 | |
| 65-69 | 136 (21.8) | 86.0 | 8.8 | 5.2 | | 14.0 | | 5.2 | |
| 70+ | 114 (18.3) | 73.7 | 18.4 | 7.9 | | 26.3 | | 7.9 | |
| Gender, n(%) | | | | | 0.29 | | 0.24 | | 0.17 |
| Male | 187 () | 85.0 | 9.6 | 5.4 | | 15.0 | | 5.4 | |
| Female | 437 () | 88.6 | 8.5 | 3.0 | | 11.4 | | 3.0 | |
| Race, n(%) | | | | | 0.88 | | 0.91 | | 0.56 |
| Black | 172 (27.6) | 86.6 | 9.3 | 4.1 | | 13.4 | | 4.1 | |
| White | 396 (63.5) | 87.9 | 8.8 | 3.3 | | 12.1 | | 3.3 | |
| Other/missing | 56 (8.9) | 87.5 | 7.1 | 5.4 | | 12.5 | | 5.4 | |
| Educ4, n(%) | | | | | 0.90 | | 0.82 | | 0.60 |
| HS or less | 96 (15.4) | 86.4 | 9.4 | 4.2 | | 13.5 | | 4.2 | |
| Some college | 129 (20.7) | 86.1 | 8.5 | 5.4 | | 13.9 | | 5.4 | |
| College grad | 154 (24.7) | 87.0 | 9.7 | 3.3 | | 13.0 | | 3.3 | |
| Grad deg | 245 (39.3) | 89.0 | 8.2 | 2.9 | | 11.0 | | 2.9 | |
| income | | | | | | | 0.01 | | 0.01 |
| <$10,000 | 35 (5.9) | | | | | 29.6 | | 14.3 | |
| $10,000-24.9 | 80 (13.5) | | | | | 15.0 | | 5.0 | |
| $25,000-49.9 | 81 (13.6) | | | | | 13.6 | | 4.9 | |
| $50,000+ | 398 (67.0) | | | | | 9.8 | | 2.3 | |
| | | | | | | 20.0 | | 3.3 | |

*n=8 with MCI

All pvalues from Fisher's exact tests

## O.16.5
## The Health Literacy Toolshed: An online database of health literacy measures

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Margaret Jones, Boston University Medical Center
Michael Paasche-Orlow, Boston University Medical Center

Background: There are a considerable number of tools that measure a person's health literacy; however, it is not always clear which is most fitting to use. We created a curated website of validated health literacy measurement tools to aid health practitioners and researchers in finding tools that measure health literacy.

Methods: Beginning in 2015, a literature search was completed quarterly to obtain published and validated tools. Trained research assistants determined appropriateness of the measurements for the Toolshed website. A tool can be included if it measures some construct of health literacy with validation data including more than 100 subjects. Data abstracted from each tool include: 1) health literacy domain(s) and languages measured; 2) validation sample size and demographic data; 3) reliability (inter-rater and Cronbach's alpha); 4) specific context (vs general use); 5) administration instructions, number of items, and duration; 6) modes of administration (e.g., computer, face-to-face, paper and pencil, phone); 7) psychometric methods (classical test theory vs Item Response Theory) and key findings; and, 8) contact information for the corresponding author. With copyright permission the tool and administration

instructions are included. Multiple search and filtering features on the website allow for rapid identification of relevant tools.

Results: To date, information on 139 tools has been published onto the website. The site contains measures in 16 languages. While 83 (60%) of the tools were developed for general use, 56 (40%) target one of 15 specific clinical and public health contexts. The most common domains are prose comprehension, numeracy, and information seeking. While most of the tools are objective tests, 31 (22%) are self-report (i.e., subjective) tools. Availability: 44 (32%) of the tools are available for download directly from the website and 33 (24%) of the measures are available online with a provided link. The site has had almost 37,000 visits since its publication in late 2015.

Conclusions: We have a publically available curated website resource that provides validated peer-reviewed health literacy tools for clinicians and researchers. We will continue to add new items quarterly and will provide an interactive tour of the site.

## O.17.1
## All in a day's work: Immersive learning and the geography of healthcare communication

**Sarah Collins, University of Manchester**
**Jemma Drake, University of Manchester**
**Emma Romy-Jones, Manchester Medical School**
**Gary Thompstone, Manchester Medical School**
**Ian Townsend, Manchester Medical School**

Background: A study of multidisciplinary communication in head and neck cancer (by one of the presenters) has proved a rich resource for teaching:

a) informing the design of our purpose-built consultation skills centre

b) inspiring the creation of sessions representing patients' journeys through illness and treatment

c) **encouraging tutors, simulated patients, students and administrators to engage with patients' stories and** share their own;

d) facilitating interaction and team-working between tutors, students, simulated patients and patient educators;

e) enacting the geography of communication in multidisciplinary clinics, with movement between public and private spaces.

f) allowing us to construct environments which are time-pressured, and emotionally charged.

Methods: Simulated clinics and fictionalised patient journeys provide a form of immersive learning. By blending simulated with real, patient with professional perspectives, and research with teaching, we seek to promote holistic, multi-layered understanding of the intricacies of healthcare communication.

This presentation will open in the form of a real-time, immersive learning environment in which everyone participates, witnessing significant **moments in a patient's journey between home and clinic, through 'f**lash scenarios' and 'glimpsed encounters'.

Findings: Our evaluations are free-text comments, email correspondence, participant observations and recorded conversations, over 4 years. These show:

• Students identify more closely with the patient and health professional, seeing them in different lights at different points in the clinic and developing understanding of their shifting roles and responsibilities.

• The potential **of simulated patients' contributions** (acting expertise, responsiveness and ability to improvise, experie**nce of seeing things from patients' perspectives**) is maximised.

• Students can rehearse (or revisit) experiences in clinical placements.

• The sustained impact of this learning is attested to in the stories students recount, post-qualification.

• The versatility and authenticity of this approach is evidenced in its successful translation into other simulated contexts: GP surgery, A&E, a mental health unit.

Discussion: Learning how to navigate a clinical environment in all its complexities equips students for managing the challenges and demands of working in healthcare.

Post-qualification, students return to contribute their clinical experiences – thus sessions are constantly renewed and responsive to current priorities in healthcare delivery and patient experience.


## O.17.2
## Does self-efficacy of competences grow after an integrated program of whole-task simulations?

**Katelijne Baetens, University of Antwerp**
**Katrien Bombeke, University of Antwerp**
**Nele Michels**
**Angelica Meers**
**Benedicte De Winter**

Background:  For 15 years the Medical School at the University of Antwerp has been teaching medicaltechnical and communication skills as separate entities by different teams. Students often did not feel sufficiently prepared to combine these skills. Therefore, in 2015 both teams started a new case-based and learning-agenda-led program for 1st (M1) and 2nd master (M2)-year students. The objective of this program is to integrate  skills, with clinical reasoning and to provide students the opportunity to practice in a realistic consultation setting. In this study we investigate if students' self-efficacy on competences ameliorated after the program.

Methods:  The program consists of steps one to four in M1 and step four in M2.

1) 3 students perform 3 consultations with a simulated patient, which is videotaped and concluded by SP- and peer-feedback

2) Individual review of the video

3) 6 students and a tutor review selected video sequences with feedback and training of skills according to Agenda-Led-Outcome-Based method (ALOBA).

4) 3 students and a tutor perform 3 consultations with a simulated patient. Peers and tutor provide feedback using the mini-CEX

Students fill in  a validated self-efficacy questionnaire, based on a CanMEDS competence based inventory (CCBI). They are asked to estimate their knowledge, motivation and skills,  before and after both programs. One Way ANOVA was used to measure differences in selfefficacy ($p \leq 0.05$).

Students were also asked feedback about the lessons.

Findings:  Preliminary results show that students grow in their self-efficacy on knowledge and skills regarding all the CanMEDS roles, with the highest scores after M2. A lot of competences' mean scores reduce again between the M1 and M2 programs. Overall mean scores (N=671) were highest for perceived motivation and lowest for the Medical Expert role. Students highly appreciated the program.

Analyses are currently performed, final results will be presented in Porto.

Discussion:  From the start students are already highly motivated, possibly contributing to the lack of significant effects. Students perceived themselves as less sure as regards clinical reasoning and treatment plans. Next, mean scores on the particular competences indicate how students can be even better coached before, during and after the program.


## O.17.3
## Early integration of clinical reasoning and communication skills teaching in the medical curriculum

**Amal Shibli-Rahhal, University Of Iowa Carver College Of Medicine**
**Ellen Franklin, University Of Iowa Carver College Of Medicine**
**Marcy Rosenbaum, University Of Iowa Carver College Of Medicine**

Background:  Since clinical reasoning (CR) guides and is guided by information collected from the medical interview through effective communication, we integrated history taking and CR early into our medical curriculum. Our

concern was whether early integration of CR into history taking could negatively impact students' communication skills (CS).

Methods: Two cohorts of first year medical students (N=177 in 2015 and N=178 in 2016), conducted one-on-one interviews with simulated patients (SP) focused on demonstration of effective CS. They then participated in group activities introducing them to CR. Finally, students conducted another one-on-one interview, where they were given 3 timed breaks to perform CR while demonstrating effective CS. During breaks, students analyzed the information collected, developed/refined a differential diagnosis and decided what additional information to obtain.

After both on-on-one interviews, SPs rated the students' performance on key CS (establishing rapport, empathy, use of summaries, adequate transitions, and quality of questions asked). In 2016, SPs also rated a random sample of 53 students on the same CS during each of the three timed breaks of the second interview.  We aimed to evaluate the direct effect of CR on CS during the interview and to obtain a more global assessment at the end of the interview. For each item on the survey, SPs placed students as "not yet", "emerging", "developing", "effective", or "strong". A grade of 0, 0.5, 0.7, 0.9 or 1 point was assigned to each category respectively.  Student performance on the 2 interviews was compared using chi-square and t-tests, and performance across the breaks was compared using ANOVA.

Results:  No change in overall student performance and in performance on the key CS was seen between interview 1 and 2 (overall class average 87.3% versus 87.7%, p-value 0.5 in 2015; 88.2% versus 88.0%, p-value 0.8 in 2016).  There was no difference in performance across the three breaks of interview 2 in 2016. Students appreciated the introduction of CR into the interview and felt it reflected real-world situations and made them better appreciate the importance of effective communication.

Discussion:  CR can be introduced early into the medical interview without negative impact on students' CS.


## O.17.4
## Exploring patient-centredness in undergraduate medical students using an Integrated Behaviour Model

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**Eli Bitzer, University of Stellenbosch**
**Ben van Heerden, University of Stellenbosch**

Background:  Patient-centredness, an approach that puts the patient at the centre of the consultation, and thus focusing on patients instead of on their diseases, has been identified by most medical schools as a desired core competence of their graduates. Despite some curriculum initiatives, medical students often display a lack of patient-centredness upon graduation.  This bears reason for concern and it was thus deemed important to explore possible factors that influence the teaching and learning of patient-centredness in an undergraduate medical curriculum. This research study set out to understand the teaching and learning of patient-centredness across an undergraduate curriculum.

Methods:  An exploratory programmatic case study design was used for the study. Focus group interviews were conducted with final-year medical students. Themes of meaning were deduced from the data by employing components of an integrated behaviour model (IM) of Fishbein.

Results:  The findings of the study revealed that seven factors plays a role in the learning experiences of undergraduate medical students namely, background characteristics of students, attitudinal factors, subjective norms (the hidden curriculum), student self-efficacy, acquired skills and knowledge, the environment or context within which patient-centredness is taught and learnt as well as assessment of learning.

Conclusions:  Patient-centredness is a complex construct and researchers often tend to focus on only one of its components. While communication is a critical aspect of patient-centredness, this paper attempts to highlight all the factors curriculum developers should consider when they plan for the teaching and learning of patient-centredness in undergraduate medical students. What is clear from the study is that the teaching and learning of such a multidimensional construct, require a comprehensive approach in order to be effective and the Integrated behaviour model of Fishbein seems to be a useful and applicable theoretical model to apply.


## O.17.5

**Integrating effectively patient-centred communication and clinical reasoning skills in history taking training for undergraduate students.**

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**Frederique de Ree-Rammeloo, Academic Medical Centre, Medical Psychology**
**Hilde Oosterhuis, Academic Medical Centre, Medical Psychology**
**Leonie Abou Habaga - Bultje, Academic Medical Centre, Medical Psychology**
**Wassilis Bruins, Academic Medical Centre, Medical Psychology**
**Marcel Fabriek, Academic Medical Centre, Medical Psychology**

Background: Preclinical trainings are often focused on basic interview skills and not on thinking about differential diagnoses or clinical management (Keifenheim 2015). Teaching communication and clinical reasoning in isolation may prevent students from understanding the important link between these skills and may lead them to undervalue the psychosocial aspects of patient care (Windish et al. 2005). Medical students tend to lose patient-centered attitudes as they progress through medical school, especially during clinical clerkships (Aper et al. 2015). At the same effective history taking requires clinical knowledge to identify relevant questions and to interpret the patient's answers. Moreover, transfer of communication skills is most effectively when trained in a context resembling clinical practice. We developed a structured teaching method enabling students to integrate the active listening and basic clinical reasoning tasks.

Methods: Students are trained in small groups of 6 students, each practicing history taking with a simulated patient who initially presents the same reason for the encounter. Students prepare the role play by 1) doing an elearning on active listening skills and 2) studying 5 or 6 predefined diagnostic protocols related to the same reason for the encounter. The elearning presents active listing skills related to: a) relationship building; b) gathering reliable biomedical information about the complaints; c) asking about the patient's ideas, concerns and expectations; d) structuring the consultation (Kurtz et al. 2003). Clinical reasoning instruction focused on developing a patientspecific problem list and differential diagnosis. Problem lists included signs and symptoms of disease, past medical history, family history, psychosocial history, and patient preferences for care (Windish et al. 2005).

Findings: The structured teaching method was well received among all second year students in 2017. Students were able to combine active listening and clinical reasoning skills in their roleplay. They were able to make a differential diagnosis identifying the primary and secondary probable diagnoses from a predefined list of four possible diagnoses. Being supplied with a predefined set of diagnostic protocols was helpful.

Implications: The presumed positive impact on transfer from a preclinical training setting with integrated history taking to future clinical practice needs to be evaluated.

## O.18.1
## A scale assessing doctor-patient communication in a context of acute conditions based on a systematic review

**Melanie Sustersic, Groupe Mutualiste Hospitalier**
**Aurelie GAUCHET**
**Charlotte Gibert**
**Anais Kernou**
**Alison Foote**
**Celine Vermorel**
**JL Bosson**

Background: There is no validated generic tool to measure Doctor-Patient-Communication (DPC) in a context of acute conditions.

Objective: To create and validate such a scale in a real population.

Materials and method: We performed a systematic review of validated DPC scales available in English. From these, using a theoretical model based on a multidisciplinary approach, we selected pertinent items that met the inclusion criteria and included them in a simple questionnaire. This tool based on a synthesis of the literature was then validated in a prospective study in two hospital emergency departments.

Results: We found 22 pertinent questionnaires and scoring systems. From these, we extracted items and built a scale based on 15 questions with graded responses (Likert from 1 to 4). The mean time for questionnaire completion was 3 minutes. We included 189 adults and adolescents in the study and analyzed complete responses to the questionnaire by 149 patients, gathered over the phone one week after their consultation. The scale had high internal consistency (Cronbach's alpha = 0.89) and good external validity. Two questions were removed due to redundancy giving a scale based on 13 questions.

Conclusions: We have created an easy-to-use and validated generic questionnaire to assess DPC in a context of acute conditions, usable both in clinical research and in routine practice.

### O.18.2
### Discrepancies in Measures of Patient-Clinician Communication about Sexual Health in Breast Cancer

**Jennifer B. Reese, Fox Chase Cancer Center**
**Kristen Sorice, Fox Chase Cancer Center**
**Stephen J. Lepore, Temple University College of Public Health**
**Mary Catherine Beach, Johns Hopkins School of Medicine**

Background: Self-report measures are commonly used to assess rates of patient-clinician communication about sexual health in cancer; how well such measures correlate with actual dialogue is not known. In a sample of breast cancer outpatients, we examined associations between and agreement/discrepancies in rates of patient-clinician communication about sexual health across patients' self-reports and coded dialogue for the same topics.

Methods: Female patients with breast cancer were recruited from waiting rooms in an oncology clinic; clinic visits were audio recorded. Immediately after the encounter, women self-reported whether communication about specific sexual health topics occurred during their visit (vaginal dryness/discomfort, sexual interest/excitement difficulties, orgasm difficulties, body image, and relationship difficulties) on a standard survey. Transcripts of audio-recordings were coded for communication about these five topics. To determine associations between the self-reported and coded communication, Phi coefficients ($\varphi$; correlations between dichotomous variables) were calculated by topic. Agreements were classified by type (communication absent or present); disagreements were classified as self-report omission (with evidence of specific dialogue in visit) or commission (without evidence of specific dialogue).

Findings: 134 breast cancer patients (mean age=58 years; 75% partnered) were recorded interacting with one of 7 oncology clinicians and completed self-report surveys. All associations between self-reported and coded communication were significant ($p<.01$). Associations were strongest for relationship difficulties ($\varphi=.76$, 120 agree "Absent"; 9 agree "Present"; 3 omissions; 2 commissions) and vaginal dryness/discomfort ($\varphi=.75$; 91 agree "Absent;" 29 agree "Present"; 8 omissions; 5 commissions). These topics were generally discussed directly during encounters (e.g., "Has chemotherapy dried you out in the vagina area?"). Associations were weakest for sexual interest/excitement ($\varphi=.27$; 121 agree "Absent"; 2 agree "Present"; 2 omissions; 9 commissions), body image ($\varphi=.33$; 113 agree "Absent"; 5 agree "Present"; 6 omissions; 10 commissions), and orgasmic difficulties (3 commissions). Commissions frequently occurred when clinic communication was indirect or very general (e.g., "Are you still intimate?").

Discussion: Considerable discrepancies were found across two measures of communication about sexual health for breast cancer patients, particularly about topics where communication was indirect. Breast cancer clinicians and patients should be encouraged to communicate directly about sexual health, including interest/excitement, body image and orgasm.

### O.18.3
### Effect of communication coaching on responding to patient negative emotion and clinician and patient satisfaction in inpatient and outpatient settings

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**Xiaomei Gao, Duke University**
**Laura Svetkey, Duke University**

Objective: Effective clinician-patient communication provides the foundation for high quality care and is linked to higher patient adherence and satisfaction. Recently, quality communication has also been linked to lower burnout

among providers. Reducing burnout can have implications not just for the health and turnover of the clinician workforce but also patient outcomes, such as medical errors. Thus, improving communication is a priority for many health systems.

Communication coaching has not yet been empirically tested on a large scale. In this randomized controlled trial, we tested a coaching intervention to improve clinician-patient communication for physicians and advanced care practitioners in two large divisions in the Duke Department of Medicine: oncology and hospital medicine. The aim was to test whether coaching improved communication, patient satisfaction, and clinician satisfaction.

Methods: We included 62 clinicians (physicians and advanced practice practitioners) relatively equally from two divisions; we randomly assigned clinicians in a 1:1 fashion to intervention or control arms. For the intervention clinicians, we provided communication coaching that involved one initial face-to-face meeting to discuss challenges, then two coaching sessions (each session included two audio recorded encounters for oncology and two hours of live shadowing for inpatient hospitalists) that was followed by feedback on communication (for oncology after encounters were transcribed; for hospitalists in between patients). All clinicians completed baseline and follow-up surveys on satisfaction and comfort addressing patient expressed negative emotion.

Results: Clinicians assigned to the intervention arm had improved Press-Ganey satisfaction ratings whereas clinicians in the control arm had the same or worse ratings. Clinicians in the intervention arm showed improvements in how they responded to patient negative emotion from pre-to-post intervention. Clinicians in the intervention stated the coaching improved their communication and would recommend it to a colleague. We found no differences in clinician satisfaction.

Conclusion: This is one of the largest studies to test the benefits of coaching. Clinician communication skills improved and importantly, so did patient satisfaction scores. Coaching shows promise for improving the patient experience.

## O.18.4
### Relationship-centered communication training improves patient assessment of physician communication

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Background: Merit-based incentive payment systems challenge health systems to improve patient experience. Relationship-centered communication (RCC) has been shown to enhance patient experience and improve patient outcomes. Interactive workshops are a venue for clinicians to learn RCC skills. We aimed to assess the impact of a RCC training workshop on patient experience in the ambulatory setting.

Methods: Wake Forest Baptist Health, an academic health system in North Carolina, developed a 7.5 hour workshop to teach RCC to academic and community clinicians. In collaboration with the Academy on Communication in Healthcare (ACH), eight physician trainers facilitated small group workshops utilizing a 3 phase model for the interview: 1) Connecting with patients and setting an agenda for the visit 2) Relationship building skills to elicit the patient's perspective, convey empathy and build partnership 3) Engaging patients in a dialogue regarding the nature and management of their problems.

We compared the percentage of patients rating their physician's communication quality as "top-box" (highest rating) during the 6 months before and 6 months after workshop attendance using Press Ganey's Clinician and Group Consumer Assessment of Healthcare Providers and Systems (CGCAHPS). A Wilcoxon signed rank test was used to compare pre- and post-PERCC average percent of top-box scores.

Findings: From November 2015 through June 2017 98% of 251 physician attendees rated the impact of the workshop as "moderate to high" on both "competence to practice RCC" and "patient outcomes."

The average percent of top-box scores on "physician communication quality" was significantly lower before training compared to after training (92.989 versus 93.8537, p-value = 0.0059). Of the 65 physicians who had survey data before and after training, the top-box scores increased most for physicians with pre-workshop scores below the

mean (p-value=0.0551). We did not detect a significant difference between survey scores for surgeons and non-surgeons.

Discussion: Attending a workshop on RCC was associated with a 0.8647 percentage increase in top-box scores in physician communication quality measured over 6 months. This percentage increase translates into an approximate 10 percentile improvement in national CGCAHPS comparison data. Further studies will assess the durability of RCC skills acquisition.

### O.18.5
### The role of signposts in promoting or inhibiting patient-centred care: a study of physician-patient consultations

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**Rowena Viney, UCL**
**Ann Griffin, UCL**

Background: *Working in partnership with patients* implies sharing perspectives and the active participation of both parties in a consultation. This study examined how doctors use verbal behaviours to make the structure of the consultation explicit and to integrate patients' needs.

Methods: Physicians sitting a professional examination were invited to participate over two weeks. The 78 participants (84% of eligible candidates) were 36 UK-trained and 42 internationally-trained doctors, 51% women, mean age 32 years. Simulated consultations from a 'history-taking' station were recorded and transcribed. Two independent raters divided the consultations into Calgary-Cambridge Guide tasks and identified verbal behaviours to make organisation overt, specifically 'signposting': defined as a statement to orient the patient to what would follow in the consultation. Patient concerns and cues were identified using the Verona Coding Definitions of Emotional Sequences. Mixed methods analysis included frequency counts and linguistic analysis of verbal phenomena.

Findings: Doctors used few signposts (majority 2-4 per consultation, range 0-11). Signposts were categorised using linguistic structure, clarity of language and whether the 'signpost' was informative; signpost frequency decreased when quality criteria were applied. Doctors rarely shared their plan for the consultation or signalled a transition to the next task. Most signposts were used to indicate a change of topic or to preface 'sensitive' topics, although the topics highlighted and language used varied among doctors. Patient concerns and cues were frequently unacknowledged, although doctors exhibited a preference for soliciting patient concerns towards the end of the gathering information task. Doctors sometimes used signposts to deflect the discussion away from patient concerns, commonly moving the conversation back to biomedical questioning.

Discussion: As the 'host' of the consultation, the doctor can facilitate a working relationship based on a partnership and shared control. Verbal behaviours used by doctors to shape the structure of the consultation showed little evidence of strategies to promote patient participation or patient-centred care. Reasons for this may include the demand characteristics of the examination and prevailing beliefs about priorities in the medical outpatient consultation. The mixed methods approach proved effective in exploring the consultation structure and the nuanced role of verbal behaviours in negotiating control.

### O.19.1
### Alternative package leaflets improve understanding of side effects – a randomized controlled exploratory survey

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Background: When listing side effects, current German and UK package leaflets do not distinguish to what extent they are indeed side effects caused by drug intake or instead symptoms occurring regardless of drug use. We recently showed that most health professionals misinterpret the frequencies of listed side effects as solely caused

by the drug. The present study aimed to verify whether 1) these misinterpretations also prevail among laypeople and 2) alternative package leaflets can reduce misunderstanding.

Methods: In March 2017, 397 laypeople out of 400 approached completed an online survey. They were randomized to one of four formats: three alternative package leaflets (drug facts box with/without reading instruction, narrative format with numbers) and one standard package leaflet (control) for a fictitious drug. Each package leaflet listed four side effects. Within alternative formats, two side effects were presented as occurring more often with drug intake, one as occurring equally and one as occurring less often. Alternative formats also include information on frequencies with and without drug intake and a statement on causal relation. Standard package leaflets (control) did only include information on frequencies of side effects with drug intake. Questions were asked on general occurrence and causality of side effects.

Findings: Participants randomized to the standard package leaflet were unable to answer questions on causality. For side effects occurring more often with drug intake, only 1.9% to 2.8% responded correctly compared to 55.0% to 81.9% of participants who received alternative package leaflets. For side effects occurring equally or less often, 1.9% and 1.9% responded correctly with standard package leaflets compared to 23.8% to 70.%% and 21.0% to 43.2%, respectively, with alternative package leaflets. It remains unclear whether one alternative format is superior to the others.

Discussion: Information on the frequency of side effects in current package leaflets is misleading. Comparative presentation of frequencies for side effects with and without drug intake including statements on the causal relation significantly improves understanding.

## O.19.2
## Effect of a Technology-Enabled Educational Intervention on Safe Use of Opioid Pain Medication in an Emergency Department

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**Abbie Lyden, Northwestern University**
**Scott Hur, Northwestern University**
**Lauren Opsasnik, Northwestern University**
**Morgan Eifler, Northwestern University**
**Mark Courtney, Northwestern University**
**Patrick Lank, Northwestern University**
**Howard Kim, Northwestern University**
**Kenzie Cameron, Northwestern University**
**Mike Wolf, Northwestern University**

Background: Unintentional overdose from prescription opioids is a leading cause of death in the U.S., with concomitant use of opioids and sedating medications being a major root cause. We implemented an opioid risk communication strategy in an Emergency Department (ED); a setting where opioids are prescribed in high volume but often without counseling or follow-up.

Methods: We conducted a 3-arm randomized controlled trial investigating a multi-faceted educational intervention. Patients received spoken counseling at the time of prescribing, written educational materials automatically dispensed via electronic health records at discharge, and SMS text message education post-visit. Consecutively discharged patients at an urban academic ED (annual volume >88,000 visits) with a new opioid prescription were enrolled. Patients returned medication diaries after 10-days. Outcomes included the presence of dosing errors (dosing interval too short, exceeding recommended pills per dose, exceeding recommended pills per day) or concomitant use (evaluating for opioid use with potentially sedating medications). Health literacy was measured using the Newest Vital Sign (NVS). Error rates are reported overall and stratified by health literacy.

Findings: 260 patients returned medication diaries. There were no significant differences in demographic factors between study arms. Overall the sample was 41% male, with a mean age of 45.0 (SD=14.5) and 71.5% had adequate literacy. Review of the medication diaries showed that dosing errors occurred infrequently and there was no difference between arms (usual care: 16.0%; intervention: 12.97%, p=0.52). Taking concomitant sedating medications was more common, but also did not differ (usual care: 37.3%; intervention: 25.9%, p=0.07). Combining both error types, those in the intervention arms were significantly less likely to have any error (usual care: 48.0%; intervention: 33.5%, p=0.03). Notably, the intervention did reduce concomitant use errors for those with limited health literacy (usual care: 36.8%; intervention: 14.6%, p=0.04), but not for adequate (usual care: 37.5%; intervention: 30.1%, p=0.37).

Discussion: Dosing errors were infrequent in our sample and did not appear to be influenced by our intervention; however, patients exposed to the interventions were less likely to have any medication error. The concomitant use of a sedating medication by those with limited health literacy primarily drove this difference.

**O.19.3**
**Patients' Willingness to Engage with an Interactive Voice Response (IVR) System to Monitor Prescription Medication Use**

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Background: Adverse drug events (ADEs) often go undetected, as many patients **don't know** symptoms to watch for and primary care practices lack channels for reporting issues.

Methods: We created the Electronic Medication Complete Communication (EMC2) Strategy to systematically improve patient knowledge about medications and create an ADE screening mechanism. It is currently being evaluated with 67 high-risk drugs at FQHCs in Chicago in a randomized controlled trial funded by NIDDK. Among other intervention components, the patient is prompted to call an EHR-tethered Interactive Voice Response (IVR) system that probes for adherence and side effect concerns, relaying identified issues to the clinic via HL7 lab report. We tracked preliminary IVR use data (call-in rate, number of prompts needed, interval between prompt and call, and patient satisfaction with call) to assess acceptability of this innovative technology as a mode of communicating with the clinic.

Findings: As of 12/20/17, 107 participants have been prompted, via text or phone, to call into the IVR system. 72 (67%) have initiated and 67 (93%) completed the call. 39 (58%) reported a medication-related concern, triggering a lab report.

Of completed calls, 61 were prompted by text, 6 verbally. 27 participants (40%) called within 24 hours of first prompt. Another 21 (31%) called within 72 hours.

Participants in the intervention arm (n=71) are asked during the 1-month interview about their experience with the system. 56% (n=40) reported calling in. Of those, 85% said the voice was easily understandable and found speed, length, questions, and response options satisfactory. 70% would want an IVR call with future prescriptions; 55% said it helped them communicate with their doctor. Average quality and satisfaction scores were 9.2 and 9.7 (out of 10) respectively.

Discussion: Success of the strategy hinges upon patient compliance with engaging the IVR system. The degree of patient interaction with the IVR platform to date has so far greatly exceeded the research team's expectations. These findings should be encouraging to clinics that patients are receptive to calling an IVR system and responding to an automated voice about health behaviors, expanding the scalable tools for patient engagement at a clinic's disposal.

**O.19.4**
**Providing information about late-effects to cancer patients and survivors: What to say and when?**

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Background: Cancer survivors are at risk for developing late-effects, i.e. health problems caused by the cancer and/or its treatment. Late effects can affect any organ system and can arise years or decades after the treatment. Many survivors lack knowledge of late effects. Information from health care personnel about late-effect is necessary to enable self-management and promote a healthy life-style. We explored the experiences of oncologists, oncologists-in-training (OiT) and general practitioners (GPs) regarding their current practices for providing information about late-effects to patients and survivors.

Methods: Based on purposeful sampling, 16 focus-group interviews with 70 physicians were conducted (18 oncologists (mean age 43); 6 pediatric oncologists (mean age 50); 16 OiTs (mean age 35) and 30 GPs (mean age 45)) representing four university hospitals and urban, semi-rural and rural primary care settings across Norway. The interviews were audio-recorded, transcribed and analyzed using principles of thematic content analysis.

Findings: "Lack of routines for providing information about late-effects" was identified as the main theme, including perceived ambivalences regarding what to say and when? Prior to treatment onset, the hospital doctors reported that they are obliged to inform about late effects. However, they experienced that the patients are not receptive to such information at this time, and that there is no standard system for repetition. At completion of treatment or follow-up consultations, the OiTs reported that if they are the last ones to see the patient before discharge, they lack necessary knowledge to inform about late effects. When patients visit their GP after hospital follow-up period, GPs were uncertain of how much information the patients have received at the hospital. Overall, the physicians had trouble balancing the need to provide the necessary information and the wish to let the survivor feel healthy and avoid causing unnecessary anxiety.

Discussion: There seem to be a gap in practice between an obligation to provide information about late effects and uncertainty of how to actually do it. There is a need for a system which ensures a clear division of responsibilities, increases knowledge, and improves information exchange between the different levels of health care system.


## O.19.5
## Tackling inappropriate antibiotic prescribing for ARTIs in primary care: What can we learn from published qualitative research?

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Background: Reducing unnecessary prescribing remains a key priority for tackling the global rise of antibiotic-resistant infections. A 2011 systematic review and meta-ethnography of GPs' experiences of antibiotic prescribing for acute respiratory tract infections (ARTIs) concluded that interventions aimed at more prudent prescribing should incorporate five aspects: allow GPs to reflect on their own prescribing; help decrease uncertainty about appropriate ARTI management; educate GPs about appropriate prescribing; facilitate more patient-centred care; and be beneficial to implement in practice. Yet, several new studies have been published since then and the continued relevance of these findings cannot be assumed. We performed an update of this work, while expanding the original focus to encompass all primary care professionals (PCPs) who can prescribe or dispense antibiotics for ARTIs.

Methods: We searched MEDLINE, EMBASE, PsycINFO, CINAHL, ASSIA, and Web of Science from inception to June 29, 2016. We grouped identified studies according to their thematic focus (intervention vs. usual care) and performed two separate line-of-argument syntheses.

Findings: We included 53 articles that reported the experiences of over 1300 PCPs. Analysis of usual care studies showed that PCPs assume multiple roles in the context of ARTI consultations (the Expert Self; the Benevolent Self; the Practical Self), depending on the range of intrapersonal, interpersonal, and contextual situations in which they find themselves. Analysis of intervention studies identified four ways in which PCPs may experience quality improvement interventions (Compromise; "Supportive aids"; Source of distress; Unnecessary).

Discussion: Most of the factors identified in the original review as responsible for inappropriate prescribing were found to be still pertinent. Yet, inclusion of recent evidence on PCPs' experiences of interventions (used in real-life settings) allowed us to draw important conclusions about the possible ways that these may be employed. Contrary to the original review, we found that the use of the same intervention is experienced in a totally different way by different PCPs and that the same elements that are perceived as benefits by some, could be viewed as drawbacks by

others. Acceptability of interventions is likely to increase if these are context-sensitive and take into account PCPs' varying roles and changing priorities.

## O.20.1
**All about the money? Impact of organizational- and system-level characteristics in implementing shared decision-making in US Cancer Care**

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Background:  Shared decision-making (SDM) is poorly implemented in routine care, despite being fostered by health policies. Recently, we conducted a scoping review that identified a broad range of organizational- and system-level characteristics that influence the implementation of SDM in routine care. However, it is unclear how important these characteristics are in a specific health care setting. Thus, the aim of this study is to discuss the importance of different organizational- and system level factors in the implementation of SDM in cancer care in the US.

Methods:  We conducted semi-structured telephone interviews with stakeholders in the field of cancer care in the US. We used a purposive sampling strategy with a maximum variation approach (experts with different roles, backgrounds, workplaces, and demographic characteristics). The final sample size was determined by theoretical saturation. Potential participants were invited by email. Interviews were audio recorded, transcribed, and analyzed drawing on conventional content analysis (integrated approach of inductive and deductive coding).

Findings:  36 invitations were sent and 30 participated. 7 clinicians, 5 researchers, 5 healthcare organization leaders, 4 patient representatives, 4 federal agency officers, 2 professional organization leaders, and 3 other stakeholders were interviewed (mean of 25 years of experience, 43% female). One overarching theme emerged from the analyses, indicating that the role of money in the US health care system and the fact that physician and hospital revenue is often related to the delivery of certain cancer treatment options is seen as an important barrier in the implementation of SDM in routine cancer care in the US. Alternative payment models were discussed as possible solutions. Furthermore, the implementation of multidisciplinary clinics, where all clinicians discuss treatment options with the patient in one single visit, was seen as a way to better implement SDM in cancer care.

Discussion:  The results show that the aspect of revenue generation seems to have a considerable impact on SDM implementation efforts in US cancer care. This aspect, as well as other organizational- and system-level characteristics should be taken into account in SDM implementation efforts, which up to now too often focused solely on interventions on the individual patient-clinical level.

## O.20.2
**Decision coaching for women with ductal carcinoma in situ – a cluster-randomized controlled trial**

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Background:  Women with breast cancer claim the implementation of informed shared decision-making (ISDM). In addition, medical guidelines support these claims. In order to implement ISDM, we developed a complex intervention for women with ductal carcinoma in situ (DCIS). It comprises an evidence-based decision aid and decision coaching led by specialised nurses. We wanted to assess the effect of the decision coaching intervention on the extent of patient participation in medical decision-making.

Methods:  We conducted a partially-blinded cluster-randomized controlled trial with 16 breast care centres to compare the intervention (IG) with standard care (CG) in Germany. Inclusion criteria: Patients with histologically confirmed, primary DCIS. The primary outcome was the extent of patients´ involvement in shared decision-making assessed by the MAPPIN-$O_{dyad}$-observer instrument (calculated by mean values of 11 indicators that are assessed on

a five-point-scale from 0 to 4: 'competence was not observed' to 'excellent performance'; analysis of video recordings by two raters). Secondary endpoints include informed choice and the duration of consultations. We conducted the primary analysis on the level of clusters. Registration ISRCTN46305518.

Findings: 14 centres recruited 67 patients (planned 192) (IG: 37; CG: 30; analysed by modified intention-to-treat: IG: 36; CG: 28). The extent of patient participation was significantly higher in the IG (MAPPIN-$O_{DYAD}$ (SD) IG: 2.29 (0.6) vs. CG: 0.42 (0.5); difference: 1.88 (95% CI 1.26–2.50; p<0.0001). Women in the intervention group made more informed choices (47.7% (37.9%) vs. 0%; difference 47.7% (95% CI 12.6-82.7%; p=0.016). The mean duration of the decision coaching sessions was 47.5 (9.6) min. and of the physician consultations IG: 12.8 (6.6) vs. KG: 24.3 (6.3) min. We identified various barriers.

Discussion: Results indicate that in standard care, ISDM has not been implemented so far and decision coaching in combination with evidence-based decision aids enhances women´s participation in treatment decision-making. Before routine implementation, barriers need to be addressed.

## O.20.3
## Development of a pre-visit question prompt list and video intervention to motivate African Americans with glaucoma to be more involved during visits

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Background: Glaucoma is the leading cause of irreversible blindness in African Americans. African Americans are 5 times more likely to get glaucoma than Caucasians and are 6 times more likely to go blind from it.

Objective: To conduct focus groups with African Americans with glaucoma and their eye care providers to get input into the development of a pre-visit question prompt list and video intervention to increase patient involvement during visits. Methods: Eye care providers who care for patients with glaucoma and adult African Americans with a diagnosis of glaucoma were recruited from three ophthalmology clinics. Three focus groups with providers and three focus groups with African American patients with glaucoma were conducted.

Results: Sixteen patients and 15 eye care providers participated. Participants gave useful suggestions on questions that should be included on the final question prompt list. Patients felt as though the question prompt lists would be extremely useful. Unlike patients, ophthalmologists expressed concern that having patients ask more questions might increase visit length. The themes that patients and providers felt the video should focus on included: being adherent to glaucoma medications and discussing barriers to adherence with your provider, understanding what glaucoma is and asking your provider to explain the disease, asking why tests such as visual fields are done as part of glaucoma treatment, and making sure to ask your provider the questions you have about glaucoma and its treatment in African Americans.

Conclusion: African American patients and eye care providers gave useful input into a pre-visit question prompt list and video intervention. Both patients and providers felt the intervention could be useful although providers worried it might increase visit length.

## O.20.4
## Training oncologists and preparing patients for shared decision making about palliative systemic treatment

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Background. Systematic treatment for advanced cancer offers uncertain and often small benefits whilst the burden can be high. Hence, treatment decisions require Shared Decision Making (SDM). We examined the separate and combined effect of oncologist training and a patient communication aid on SDM in consultations about palliative systemic treatment.

Methods. A multi-center RCT design with four parallel arms was adopted (NTR 5489). To attain a power of 80%, we included 31 medical oncologists and 194 of their patients with advanced cancer with a median life expectancy of <12 months. Oncologists were randomized to receive training or not; patients were randomized to receive a patient communication aid or not. The oncologist training consisted of a reader, two group sessions, a booster feedback session and a consultation room tool. The patient communication aid comprised a question prompt list and a value clarification exercise to prepare patients for SDM. Either an initial consultation about the start of systemic treatment or an evaluative consultation about (dis)continuation was audio-recorded for each patient. The primary outcome was observed SDM (OPTION12) which was rated by blinded assessors. Multilevel analysis was adopted to examine the effect of the interventions.

Results. Audio-recorded consultations of 187 patients and 27 oncologists were available for analysis. A lower level of SDM was observed for evaluative compared to initial consultations (Cohen's d =0.82). Staff oncologists did not differ from residents (d=0.19). The oncologist training had a large effect on SDM among patients who did not receive a communication aid (d= 1.4), while the patient communication aid did not have an effect on SDM among untrained oncologists (d=0.03). The effect of the combination of training and communication aid was not larger than the single effect of training (Mtraining_aid=49.83; Mtraining_no aid=49.49; Mno training_aid=29.88; Mno training_no aid=29.50).

Discussion. Training medical oncologists in SDM about palliative systemic treatment improved observed SDM in clinical encounters. A patient communication aid preparing patients for SDM did not add to that effect. Additional analysis should examine the effects of both interventions on secondary outcomes, such as patient satisfaction and treatment decisions.

### O.20.5
### What matters most? A survey study to assess patient-clinician goal concordance in rheumatoid arthritis

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Background: Goal concordance between patients with chronic diseases and their clinicians has been linked to improved outcomes. Our objective was to assess the extent to which rheumatoid arthritis (RA) patient goals for treatment are concordant with their rheumatologists.

Methods: Patients with RA seen at least once in the prior 12 months at one of 2 rheumatology clinics were enrolled in a cross-sectional survey study. Both enrolled RA patients and their rheumatologists completed the RA goals measure (patients ranked their top 3 goals for RA treatment out of 8 possible choices, while clinicians ranked their top 3 goals for their patient out of the same 8 choices) prior to the clinic visit. Patients then completed a longer survey on overall health, medications taken, demographics, and health literacy. The primary outcome was degree of goal concordance defined as the number of goals (from 0 to 3) that both clinician and patient listed as one of their top 3 goals.

Findings: A total of 154 patient-clinician dyads were analyzed. Of the patients, 54.8% were female, 15.6% spoke Spanish, and 28.4% had limited health literacy. "Have less pain" was selected by both patients and their clinicians in 83% of dyads, and "have fewer problems doing daily activities" in 62%. The proportion of dyads with one shared goal was 27.9%; 2 goals, 51%; and 3, 18.8%. Of note, 26.6% of patients ranked "feel less tired" as one of their top 3 compared to only 6.5% of clinicians, and 13% of patients ranked "improve mood" compared to 0% of clinicians.

Discussion: Among 154 RA patient and clinician dyads, the majority shared at least one goal among their top 3 with "have less pain" as the most common. Clinicians prioritized avoidance of side effects while patients ranked improved sleep, less fatigue, and improved mood. Tools to facilitate goal elicitation may help improve communication of what matters most to RA patients.

**O.21.1**

**Communicating the challenges and uncertainties around polycystic ovary syndrome: clinicians' views**

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**Jenny Doust, Wiser Healthcare, Bond University**
**Jesse Jansen, Wiser Healthcare, School of Public Health, University Of Sydney**

Background: The diagnostic criteria for polycystic ovary syndrome (PCOS) were broadened by experts in 2003, resulting in the inclusion of women with milder forms within the broadened spectrum of PCOS. This has contributed to a substantial increase in the number of women diagnosed. PCOS is associated with adverse reproductive, metabolic and cardiovascular outcomes, however not all women fitting the expanded criteria may be at risk of these. Although signs of PCOS often first appear during adolescence, symptoms of PCOS overlap with normal signs of pubertal development, making diagnosis challenging. There is also no clear line dividing normal variability from the abnormality of PCOS, especially in young women. We aimed to understand clinicians' views about PCOS, and how they manage and communicate these uncertainties with their patients in practice.

Method: Doctors who diagnose and manage women with PCOS (e.g. general practitioners, endocrinologists and gynaecologists) around Australia were recruited via professional organisations, specialist groups and through snowballing. We conducted semi-structured telephone interviews; 19 completed of a planned 30. Topics included challenges and uncertainties with the diagnosis and management of PCOS, issues around patient communication, benefits and harms of a diagnosis, and the potential for overdiagnosis. Interviews were audio-recorded, transcribed and analysed thematically.

Results (preliminary): Clinicians expressed a range of views about the uncertainties in diagnosis and management. Many clinicians expressed challenges with communicating the unpredictability of long-term consequences, and challenging women's preconceptions about PCOS (e.g. permanently infertile) as a result of poor quality information they may have encountered online. Many participants expressed the importance of early diagnosis, which was seen to provide the opportunity for lifestyle changes and fertility planning. On the other hand, some were cautious of labelling women prematurely or inaccurately, and were hesitant to overload the patient in their first consultation and cause unnecessary anxiety, especially for adolescence and young women who may find it difficult to appreciate long-term consequences.

Discussion: Clinicians who diagnose and manage PCOS provide valuable perspectives regarding the current issues and uncertainties surrounding the diagnosis and management of PCOS. We will discuss the key findings and their implications for future research and clinical practice.


**O.21.2**

**Communicating uncertainty when disclosing diagnostic test results for dementia: the ABIDE project.**

**Sophie Pelt, Academic Medical Center / University Of Amsterdam**
**Leonie Visser, Academic Medical Center / University Of Amsterdam**
**Marij Hillen, Academic Medical Center / University Of Amsterdam**
**Femke Bouwman, Alzheimer center/VU University Medical Center**
**Wiesje van der Flier, Alzheimer center/VU University Medical Center**
**Ellen Smets, Academic Medical Center / University Of Amsterdam**

Background: Increased knowledge and diagnostic developments enable earlier diagnosis of Alzheimer's disease and dementia. Patients and caregivers could benefit from an early diagnosis because it may reduce their uncertainty around the nature of their symptoms. However, diagnostic testing frequently yields uncertainty, instead of reducing it. How uncertainty is addressed in diagnostic consultations can affect treatment decisions and patients' expectations and satisfaction. We investigated to which extent and how clinicians communicate uncertainty when disclosing test results.

Methods: We audiotaped clinician-patient encounters in an unselected sample of 78 new patients from eight Dutch memory clinics. In the post-diagnostic testing consultations, all segments in which clinicians expressed uncertainty were identified and transcribed verbatim. Qualitative content analysis was used to double code these segments using MAXQDA software. For each segment, the source and the topic of the uncertainty were determined.

Quantitatively, we tested for differences in the amount of uncertainty expressions based on diagnostic certainty (no dementia vs no clear diagnosis vs clear diagnosis).

Findings: 78 post-diagnostic testing consultations were audiotaped, involving 46 male and 32 female patients (mean age=71 (SD=11); mean MMSE-score=25 (SD=4)) and 22 clinicians (15 neurologists and 7 geriatricians). Clinicians discussed uncertainty in 57 (73%) of these consultations. How often uncertainty was expressed (mean=1.6, range 0-7) did not depend on diagnostic certainty ($p$= .624). Two main sources of uncertainty were identified. Uncertainty caused by probability refers to an inability to predict the future, and mostly pertained to the risk of developing dementia, or the inability to predict the course the disease. Uncertainty caused by ambiguity refers to the incompleteness, inadequacy, or unreliability of information, and related mostly to clinicians' inability to generate a definite diagnosis based on the current test results.

Discussion: Clinicians often express uncertainties when disclosing test results to patients and caregivers, remarkably, even when the (dementia) diagnosis is certain. Apparently, diagnostic testing within the context of dementia does not necessarily reduce uncertainty. Patients should be informed beforehand that diagnostic testing might not lead to certainty in order to manage their expectations. Moreover, future research should investigate if and how clinicians' discussion about uncertainty affects patient/caregiver outcomes.

## O.21.3
## How can oncologists help patients transition from cancer patient to cancer survivor? A longitudinal analysis of oncologist-patient dyads

**Carma Bylund, University Of Florida**
**Christopher Koenig, San Francisco State University**
**Patricia Parker, Memorial Sloan Kettering Cancer Center**
**Smita Banerjee, Memorial Sloan Kettering Cancer Center**
**Steve Horwitz, Memorial Sloan Kettering Cancer Center**
**David Kissane, Monash University**

Background: Completing cancer treatment can result in uncertainty for patients as they transition from cancer patient to cancer survivor. Survivorship care plans and planning are advocated as a method of easing this adjustment. How oncologists communicate with patients during this transition may also impact the patient's overall well-being. The objective of this secondary analysis was to analyze qualitatively how the therapeutic relationship changed between cancer survivor and oncologist provider over time.

Methods: Participants were 15 patients with Hodgkin's lymphoma (HL) or diffuse large B-cell lymphoma and 15 medical oncologists participating in a larger RCT on survivorship care planning. We analyzed 45 patient-provider visits across three sequential time points: (1) first post-treatment visit; (2) survivorship care planning visit; and (3) three-month post-visit. Visits were audio recorded and transcribed verbatim. The first two authors analyzed these transcripts using a qualitative descriptive analytic approach.

Findings: We noticed four salient themes from the data. (1) How to be a Survivor. Across time points, one recurring feature was conversations about being a survivor that went beyond the standardized survivorship care plan. These were enacted in a variety of ways: discussion about pre-cancer activity resumption, oncologists giving benchmarks for what is typical or normal, and patients using metaphors that implied a transformed identity. (2) Patient Activation and Engagement. Primarily in the second and third visits, patients demonstrated active attentiveness to assuming responsibility for their health more generally. (3) Interpreting Body Signals. Survivors demonstrated uncertainty and relied on oncologists to help orient them to normal and potentially problematic bodily sensations after moving into cancer survivorship. (4) Relational/relationship management. Evidence of relationships between oncologists and patients was present across time points, including gratitude expressed by patients and families, oncologists' words of encouragement, and mutually displayed knowledge of shared provider and patient social context were products of many shared visits over time.

Discussion: Understanding how patients move through transition to survivorship and how oncologists interact with patients to guide them through this process can improve survivorship interventions. Our study is innovative because we examined sequenced provider-patient survivorship visits to analyze issues that unfolded over time.

## O.21.4
## Outcomes of informing at-risk relatives about hereditary cancer: a systematic review

**Jacqueline ter Stege, Div. of Psychosocial Research and Epidemiology, Netherlands Cancer Institute**
**Fred Menko, Family Cancer Clinic, Netherlands Cancer Institute**
**Kiki Jeanson, Family Cancer Clinic, Netherlands Cancer Institute**
**Lizet van der Kolk, Family Cancer Clinic, Netherlands Cancer Institute**
**Daoud Ait Moha, Family Cancer Clinic, Netherlands Cancer Institute**
**Eveline Bleiker, Div. of Psychosocial Research and Epidemiology, Netherlands Cancer Institute**

Background:  The identification of a germline mutation underlying hereditary breast-ovarian cancer (HBOC) or Lynch syndrome (LS) implies that not only the proband, but also multiple relatives are at high cancer risk. If informed, at-risk relatives have the opportunity to undergo genetic testing and consider actions for early detection or prevention of tumours. According to current guidelines, the proband is requested to inform at-risk relatives. However, it is a matter of debate whether at-risk relatives are accurately informed by this procedure. In this study, we aimed to summarize the outcomes of the communication process in terms of the percentage of informed and/or tested at-risk relatives in both syndromes.

Methods:  In a systematic review, we included papers published in PubMed, Embase or PsycINFO between 2001 and 2017. We selected studies that investigated the outcome of informing at-risk relatives in terms of the percentage of informed and/or tested at-risk relatives. We only included full-text articles written in English.

Results:  Of the 795 articles identified, 28 articles met the selection criteria. Studies differed greatly in their methods and outcome parameters. In 14 articles (group A), the percentage of at-risk relatives informed and/or tested was based on information reported by the proband. In the other 14 articles (group B), the percentage of at-risk relatives undergoing genetic testing was based on information from genetic registers. In group A, the uptake of genetic testing ranged from 31% - 57% for HBOC, and for LS, the only  study reported a percentage of 69%. In group B, the uptake of genetic testing ranged from 21% to 44% in HBOC, and from 41% to 94% in LS. There was a lack of data on the percentage of adequately informed relatives who decided not to proceed with genetic testing.

Conclusion:  Due to great variability in study methods and outcome parameters, no firm conclusions can be drawn from current evidence about the outcomes of informing at-risk relatives. There is a need for well-designed, prospective studies. However, the uptake of genetic testing in at-risk relatives seems far from optimal and alternative communication strategies should be considered.

**O.21.5**
**Uncertainty related to multigene panel testing for cancer: a qualitative study on counsellors' and counselees' views.**

**Niki Medendorp, Academic Medical Center**
**Marij Hillen, Academic Medical Center**
**Laxsini Murugesu, Academic Medical Center**
**Cora Aalfs, Academic Medical Center**
**Anne Stiggelbout, Leiden University Medical Center**
**Ellen Smets, Academic Medical Center**

Backgrounds: Multigene panel testing for cancer is a relatively new technique in which multiple genes associated with cancer are sequenced at once. It is primarily used to improve the identification of genetic causes of cancer in families with characteristics fitting multiple possible cancer syndromes. These panel tests may however yield uncertainty, for example by the identification of variants of unknown significance. Since insight is limited into how these uncertainties play a role in counseling, we explored counsellors' and counselees' experiences with uncertainty, and how they discuss uncertainties and decide about multigene panel testing.

Methods: Six focus groups were conducted including a total of 38 counsellors. Twelve counselees who received genetic counselling about a multigene panel test were interviewed individually. Focus groups and interviews were audio recorded and transcribed verbatim. The transcripts were analyzed inductively by two independent coders and data were collated to distill broader themes.

Findings: Counsellors experienced several uncertainties, for example when finding a variant of unknown significance or detecting an unsolicited finding. They mostly experienced difficulty in deciding what uncertain information to communicate to counselees and how to do so, especially during posttest counselling. The extent and manner of providing uncertain information differed between centers as well as between counsellors. Counsellors indicated to attach more value to counselees' preferences in decision making compared to targeted

DNA tests, because the level of uncertainty is increased. Counselees experienced difficulty in recalling which uncertainties related to multigene panel testing were discussed during genetic counselling. They primarily reported **to have experienced uncertainty about their own and relatives' risk of developing cancer. Counselees felt they had** had a say in the decision.

Discussion: Many uncertainties related to multigene panel testing were mentioned, particularly by counsellors. Counsellors need more guidance on whether and how to convey uncertainty to counselees. Possibly, undesirable practice variation in the communication of uncertainty may be prevented by determining what information should minimally be discussed during pretest counselling to enable informed decision making.

# Symposia

**Choice awareness: just a small part of shared decision making, but indispensable for the whole**

**Fania Gärtner, Department of Biomedical Data Sciences, Leiden University Medical Center, the Netherlands**
**Marleen Kunneman, Knowledge and Evaluation Research Unit, Mayo Clinic**
**Kim Brandes, Medical Decision Making, Department of Biomedical Data Sciences, Leiden University Medical Center, the Netherlands**
**Ian Hargraves, Knowledge and Evaluation Research Unit, Mayo Clinic**
**Juan Pablo Brito, the Shared Decision National Resource Center, Mayo Clinic**

RATIONALE

For shared decision making (SDM) patients' and clinicians' 'Choice awareness', i.e. awareness that there is more than one reasonable approach available and that the patient's views matter, seems a prerequisite. However, choice awareness is often lacking. Research on the manifestation and mechanisms of choice awareness is still in its infancy. This symposium addresses perceptions of patients and clinicians, and opportunities for intervention designers. In collaboration with the audience, we aim to set the research agenda, to eventually improve routine care.

PRESENTATIONS

Presenter 1: An introduction to Choice Awareness

Most SDM research and implementation has focused on information provision or preferences elicitation. The starting point of these conversations, fostering choice awareness, has received little attention so far. In this introduction, we provide a brief overview of the literature available in this area, and discuss the role of choice awareness in high quality SDM.

Presenter 2: Identifying communication strategies to stimulate patients' Choice Awareness in clinical consultations.

Empirical evidence on the effectiveness of specific communication strategies for a successful SDM process is lacking. Presenter 2 discusses the results of a video vignettes experiment, in which the effects of specific communication strategies to foster patients' choice awareness and, consequently, SDM were tested. Furthermore, the influence of patients' characteristics (e.g., age and health literacy levels) on these communication strategies will be presented.

Presenter 3: Choice Awareness in clinicians: multiple barriers to overcome

Clinicians first need to be aware and acknowledge the preference-sensitive nature of a decision themselves to present multiple options to patients. Thus, clinicians' choice awareness is a prerequisite for patients' choice awareness. Presenter 3 will discuss the role clinical practice guidelines may have in creating choice awareness in clinicians and will present results of a qualitative study which explored how oncologists decide on available options and identified barriers for oncologists' choice awareness.

Presenter 4: From the behaviors to the functions of Choice Awareness

The purpose of SDM is to advance the situation of the patient—to create a way forward. As we see signs that choice awareness behaviors affect SDM scores, further research questions open as to the how choice awareness functions in forming caring responses to patients' problematic situations. Presenter 4 presents design research, in which we are exploring the function of choice awareness through the design of the conversation aids discussed here.

Presenter 5: Implications of Choice Awareness research findings for clinical care

After each presentation, a clinical expert will kick-off the discussion with discussing the implications of the presented work for clinical care, and how research findings and future work can be used to improve care for each patient.

QUALIFICATIONS

Presenter 1 (Co-chair) has a special research focus in completed and ongoing projects in choice awareness, patient-clinician conversations and fit of care.

Presenter 2 has a background in doctor-patient communication with a focus on how to improve clinical consultations from the perspective of the patient.

Presenter 3 (Chair) has a background in SDM research with a focus on the learning needs and barriers of oncologist´s for applying SDM in daily practice as well as measurement methodology.

Presenter 4 is an expert in the design of SDM conversation aids.

Presenter 5 is a clinician, health care delivery researcher, expert in testing SDM interventions.

## S.6
## Development & implementation of a workplace communication program – 5 international perspectives

**Sharyn Milnes, Barwon Health**
**Jette Ammentorp, University of Southern Denmark**
**Richard Frankel, Indiana University School of Medicine**
**Rachelle Bernacki, Ariadne Labs**
**Stephen Brown, Institute for Professionalism and Ethical Practice**
**Peter Martin, Deakin University**
**Jonathan Silverman, Deakin University**

Presenters

Speaker 1 has 10 years' experience in curriculum design, assessment and evaluation of patient outcomes based on education program in Australia.

Speaker 2 has researched and developed an institution wide program in Denmark for the past 10 years and has published widely on institutional program implementation and management.

Speaker 3 is a world-renowned researcher and teacher of communication in healthcare in the USA and instrumental in developing and researching a programme of institutional change in relationship-centred healthcare.

Speaker 4 has published about the successful organisation program and coordinates on-line and face-to-face workshops to help other institutions develop and manage similar programs.

Speaker 5 is director of an institute for organisational communication education with broad experience in clinical consultations, educational programming, and policy deliberations.

Over the last 30 years, high quality communication has been demonstrated to improve the experience and outcomes for patients and their carers whilst conferring significant benefits to professionals and health organisations. However, there is a paucity of literature regarding the translation of this research into practice.

Here, five different international large-scale programs will be described. Presenters will provide a brief description of the background context and overview of their program, describe how organisational engagement was achieved from clinical staff and institutional management, and explore the evaluation and outcomes measured, lessons learned and future developments.

A panel discussion with the presenters will follow. Facilitation of this discussion will focus on practical aspects of implementation and sustainability of programs. Participants can use this to plan their own implementation project.

Presentation 1: Based on the experiences from the implementation of a communication program at Lillebaelt Hospital in Denmark. An extended, conceptual solution that can be transferred to other clinical settings will be presented. Future considerations include how to sustain the program, what other modules may complement the existing intervention and how this could potentially be scaled to a regional or even national level.

Presentation 2: iValidate is an evidence-based program focussed on improving person-centred care for patients with a life limiting illness (LLI) in the acute setting. The program includes educational, implementation and audit components. It provides support in the clinical setting, measurement of person-centred care and patient outcomes. This evidence has been used to affect change and engage executive and clinical staff. Future development for the program includes fostering faculty development and sustainability.

Presentation 3: The relationship-centred care initiative, a culture change project at Indiana University School of Medicine, will be presented.  This was a five year project at the largest medical school in North America that began with a dozen people and grew to over 1,000 faculty, students and administrators actively involved in the initiative.  It used AAMC exit questionnaire data to look at change outcomes that resulted from the project.

Presentation 4: The Serious Illness Care Program is an innovative, scalable system to guide discussions about preferences for patients with serious illness and their families. It aims to achieve more, better and earlier

conversations about goals of care by creating a population management system which includes clinician education and identifying patients who would benefit from discussions of preferences. The program includes courses and support for larger scale design, implementation and outcome measurement.

Presentation 5: The Institute for Professionalism and Ethical Practice(IPEP) produces relationship-centered communication training. Programming began as an initiative to translate experiences into live, simulation-based learning opportunities. It now offer a diverse array of such workshops, live and self-paced online learning programs for informed consent and error disclosure, monthly support rounds for nurses, and inter-professional humanism fellowships.

## S.7
## The way forward; how students from across the globe experience communication skills education and their vision on future challenges

**Joao Teles, Faculty of Medicine University of Porto (FMUP)**
**Nicoll Manhica, University of Iowa Carver College of Medicine**
**Sjim Romme, Maastricht University**
**Matthijs Bosveld,  Maastricht University**
**Anne Mohnke, Brandenburg Medical School Theodor Fontane**

With the understanding that communication is an integral part of healthcare, it is essential to explore how communication skills education is perceived by students both in pre-clinical and clinical years. Integrating communication skills learning with other parts of intensive health professional curriculum can be challenging. This symposium aims to provide insight about the perspectives that students, from various health professions from different countries, have about communication skills learning. The discussion will focus on both commonalities and differences on how communication skills education is perceived by students. Additionally, students will elaborate on their learning about interprofessional communication in health care.

The session will start with an evaluation of the various approaches used to teach communication skills in pre-clinical education. For example, the use of standardized versus real patients and potential for incorporation of real patients in teaching about communication skills. The symposium will also investigate how the link between pre-clinical and clinical training is perceived by students and their experiences transferring classroom learning into clinical practice. Perspectives from participating students, as well as interviews conducted with health professional students, will provide insights into how students learn about communication skills.  Gaps  and areas for improvement in learning about clinician-patient and interprofessional communication will be explored.

# Workshops

## W.8
## Mind Mapping for Family Meetings in Palliative Care

**Matthew Russell, VA Boston Healthcare**
**Anne Carr, Hebrew Senior Life**

Rationale: Preparation for high-stakes family meetings in the setting of advanced or end-stage disease requires the inter-professional team to engage in efficient perspective sharing to develop group understanding and delineate objectives for the meeting ahead. Scripted talking maps have been suggested as tools to facilitate these team huddles but can leave the focus of the experience vulnerable to the strength of each contributor's narrative. Mind mapping is a technique of using a hand drawn diagram to visually organize information. It employs multiple colors and key images in its construct. This workshop will demonstrate the use of mind mapping as an effective method for creating a stylized visual narrative that incorporates the perspectives of all individuals gathered and acts as a prompt for rich discussions.

Objectives: After this workshop, learners will be able to:

- Apply mind-mapping as a strategy for evoking an fuller appreciation of the patient's context by all members of the inter-professional team,

- Anticipate and evaluate key concepts that may arise in a family meeting using mind mapping techniques, and

- Formulate applications for mind-mapping curricula in their sites of practice.

Methods: This session will employ brief didactic with handouts to introduce the concept of mind mapping. Learners will create their individual mind maps as a way of introduction to other attendees. The group will practice several cycles of mind mapping on large posters using pre-created scenarios in which they will have a particular role in a family meeting. Discussions during and after the creation of the exercises will be tracked and debriefed by the facilitators.

Evaluation: Learners will be provided with the opportunity to complete reflection questions on their handouts and share with the group. These reflection prompts are: "What I thought I knew" and "What I came to realize". Learners will also be asked to identify opportunities for applying the mind mapping technique for teams at their home institutions. Finally, learners will have the opportunity to provide feedback and suggestions at the end of the workshop.

## W.9
## Telling One Story: Using Improv to Teach Interprofessional Empathy Skills

**Amy Zelenski, University of Wisconsin School of Medicine and Public Health**
**Mariah Quinn, University of Wisconsin School of Medicine and Public Health**
**Shobhina Chheda, University of Wisconsin School of Medicine and Public Health**

Rationale: During professional training we learn how to speak the language of our discipline, however, most of the work we will do after training is interdisciplinary. In the health professions, the lack of quality interprofessional communication and teamwork contributes to medical errors. Equally important is the benefit professionals get from forming supportive relationships with those who are with them in high-stress hospital and clinic environments. Teaching empathy in teams can produce the same positive effects that it has in patient/clinician relationships. Improvisational theater trains participants in strategies that support all communication partners being successful and "looking good", situational awareness, and empathic responding.

Learning objectives: Participants will be able to:

1. Name the rules of improv and explain how improv is related to collaborative and empathic communication.

2. Discuss how practicing complex communication tasks can increase skill and improve empathy.

3. Lead several quick improv games with your own students and colleagues.

4. Design games that will fit in your own context and content using the rules of improvisational theater.

Teaching methods: This session is an opportunity to engage in hands-on exploration of these improv techniques. Participants will take part in activities designed to help them discover their own communication patterns and learn how to deliberately break those patterns if it serves them. We will play improv games, write, and debrief together.

15 min   Introductions through improv games

5 min            Brief lecture (History of Improv and the Pedagogy of Improvisation)

5 min            Applying improv to nonverbal communication skills

20 min           Play improv games re: nonverbal communication

15 min           Debrief games

5 min            Introduce worksheet for designing session

15 min           Work in groups to design a session for home institutions

10 min           Debrief major themes / questions

Evaluation of outcomes for participants: Using a structured worksheet, we will end the session by guiding participants through the process of identifying an aspect of interprofessional communication they would like to impact in their home institutions, identifying the foundational skills involved, and designing an improv activity to teach those skills. They will discuss these plans in small groups.

**W.10**
**To be or to do, that is the question: Making aspirational goals into tangible behavioural actions**

**Wendy Maltinsky, University of Stirling**
**Vivien Swanson, University of Stirling**

This workshop will explore the ingredients of successful behavioural change goals and plans. Healthcare professionals often discuss behaviour change with clients frequently focusing on outcomes, such as losing weight, stopping smoking, getting fitter. It is not unusual to believe the individual lacks the necessary motivation when no change is evident on subsequent appointments. Motivation on its own however is insufficient to change behaviour; individuals may lack the understanding as to what specifically they need to do. Having a clear goal with environmental cues to trigger the behaviour and the means to resolve barriers to the goal, can help the individual to know what to do and when to do it. This helps to build habits.

This workshop is particularly suitable for practitioners who wish to use goals and plans to support behavioural change in healthcare settings or for anyone who would benefit from a deeper behavioural change understanding, either for own use or in workplace settings.

Objectives:

• To understand aspirational, outcome and behavioural goals

• To understand what constitutes a robust plan of action

• To develop an implementation intention with environmental prompt

• To reflect on behavioural goals/plans for personal/professional use

Format: The session will be interactive using small group discussion, reflections, simulations and experiential activities.

Outline:

| Timing | Activity |
| --- | --- |
| 8 minutes | Behavioural change lecture |
| 10 minutes | Paired discussions reflecting on previous goals and outcomes |

| 15 minutes | Small group activity drawing 'behavioural goals' from aspiration and outcome goals |
| --- | --- |
| 25 minutes | Images to collectively build a plan using navigation of hurdles and environmental prompts |
| 12 minutes | Workshop reflection to develop individual plans |
| 8 minutes | Group feedback on workshop and behavioural goals. |

Evaluation of outcomes: Participants will complete an action plan that they can use as a template for themselves or adapt to practice settings and will reflect on the value of this approach within the workshop.

Participants will receive an enactment email 6 weeks after the workshop to facilitate reflection on their use of the plan, barriers encountered and barrier resolutions they have implemented.

**W.11**
**Written assessment of communication skills: how to write effective questions using patients' vignettes**

**Claudia Kiessling, Brandenburg Medical School Theodor Fontane**
**Maria Magdalena Bujnowska-Feda, Wroclaw Medical University Department of Family Medicine**
**Geurt Essers, Dutch Network of GP Speciality Training Institutes**
**Ragnar Joakimson, The Arctic University of Norway UiT**
**Noelle Junod Perron, Geneva Faculty of Medicine**
**Marc van Nuland, KU Leuven**
**Zoi Tsimtsiou, Aristotle University of Thessaloniki & Urban Health Center of Evosmos**

Rationale: The importance of assessing communication skills (CS) among health care students is now widely recognized. The most common methods used to assess CS in undergraduate health care education are OSCE with standardized patients and direct observation of encounters with real patients in the workplace. However, written assessment using patients' vignettes in paper and/or video formats can represent an interesting additional way to assess the cognitive component of students' communication competences.

The workshop will give participants an opportunity to discover the different question and answer formats of written assessment of CS using patients' vignettes and get them more familiar with their construction.

At the end of the session, participants will be able to:

- identify cognitive educational objectives dealing with communication,

- name different ways of assessing communication using patient vignettes,

- identify challenges and use cues and tips when creating questions and answers using patient vignettes as a stimulus, and

- discuss advantages and disadvantages of using such assessment formats for their home institution.

Teaching methods and sequence of planned activities

Start: Welcome and clarification of what participants hope to learn, and of their prior knowledge on written assessment (10 minutes)

Introduction: Short presentation of workshop schedule and knowledge dimensions that may be helpful in designing written assessment (5 minutes)

Exercise:Participants will experience different ways of assessing the cognitive part of communication skills through a test (10 minutes)

Small groups: Then, they will identify the flaws present in the items of the test in small groups and make concrete suggestions of improvement (10 minutes)

Input: **The do's and don'ts of written assessment using patients' vignettes will be presented (10 minutes)**

Small groups: Participants will have the opportunity to develop their own questions and receive feedback on them (30 minutes)

Evaluation:  At the end, participants will discuss the advantages and disadvantages of using such vignettes formats in written assessment of communication skills in their home institution. Participants reflect on gained insights on written assessment by formulating a personal take-home message (15 minutes)

# Roundtable Discussions

**1**

**A meeting of minds: Exploring practical and intellectual synergies between business and health communication disciplines**

**Danielle Blanch-Hartigan, Bentley University**
**Jennifer Yule, Northeastern University**
**Krista Hill Cummings, Babson University**
**Marianne Schmid Mast, University of Lausanne**

Purpose: Our colleagues in business departments and business-focused universities can offer important perspectives on health communication research. The purpose of this roundtable discussion is to describe, share, and articulate the unique contribution of business disciplines and business perspectives to research in health communication and patient-centered care. We will discuss how to maximize different models of collaboration across business (e.g. marketing, management, economics, information technology, finance) and the arts and sciences at various stages of the research process and career levels.

Session Outline: After introductions and an overview of the goals of the discussion (15 min), we will ask each attendee to reflect on 4 questions (10 min each; 40 min total). We will end with a summarization of key themes that emerged during the discussion led by the facilitators of the discussion (5 min)

What are the benefits and barriers to working with colleagues in the business disciplines?

What models of collaboration exist and which have been the most effective in your experience? How do these differ based on career level, type of research, or stage in the research process?

How do we successfully bridge different research philosophies and norms (e.g. publication norms)?

How could we encourage different types of researchers from business universities and departments doing this work already to get involved with ICCH/EACH/AACH?

Desired Outcomes: We hope this group can highlight how to maximize the key benefits and minimize the key barriers of working in multidisciplinary teams that include colleagues from business disciplines. Discussion notes will be summarized and distributed. We will also form an email group with attendees for future resource sharing and collaboration. We hope to formalize this discussion into a commentary for submission to PEC.

This is not being organized by a previously established group.

**2**

**Anyone can learn how to communicate…or not?**

**Ietske Siemann, Radboudumc, Department of medical psychology**
**Ellemieke Rasenberg, Radboudumc, Department of Primary and Community care**
**Anke Smeenk, Faculty of Health, Medicine and Life Sciences, Skillslab**

Topic: Medical students who continuously fail their exams in communication skills and techniques.

Purpose of discussion: The discussants learn about the methods their colleagues use by discussing their own situation; they will take away valuable information from others which they may to adopt in their own professional environment.

The discussants will form their own opinion on the premise: Anyone can learn how to communicate.

Brief outline of session: Short introduction of the present situation concerning the literature on doctors and communication, and a summary of the outcomes of a questionnaire that was filled in by the NVMO (Netherlands Association for Medical Education) Special Interest Group on Communication skills (November 2017).

Next, the following questions will be addressed in a World Café setting. (In the World Café setting four to six people will sat down at a table with a paper tablecloth or placemat; everything that is discussed or mentioned is written down on the tablecloth and will result in a Mind Map. After several rounds these Mind Maps will be presented and compared.)

Can every student learn to communicate in a manner that is patient-centred?

Within the medical studies, how much emphasis should there be on these soft skills? How should they be evaluated? What are the pros and cons?

What do the discussants do when students continue to fail their exams in these soft skills?

Outcomes: After the roundtable discussion, participants will have a clear idea of the possibilities of their institute with respect to retaking these exams, and the possible steps if retaking does not change anything.

Organization: The NVMO (Netherlands Association for Medical Education) Special Interest Group on Communication skills has been working on this subject since 2016.

## 3
## Clinical Communication in Portugal: enhancing the dialogue between academia and healthcare providers

**Pedro Morgado, School Of Medicine, University Of Minho**
**Nuno Madeira, Faculty Of Medicine, University Of Coimbra**

The quality of clinical communication impacts every critical outcome in healthcare. In this roundtable, we aim at discussing initiatives to improve communication skills among healthcare professionals in Portugal, including communication with patients and communication between health professionals.

The session will be moderated by a Professor at School of Medicine of University of Minho and member of SP3CS board and a Professor at Faculty of Medicine of University of Coimbra and member of SP3CS board and will convene a panel of invited stakeholders: a representative of Portuguese Ministry of Health, a representative of the Portuguese Association of Hospital Managers, a representative of the Portuguese Medical Association and a representative of a Portuguese Medical.

The panel objectives are: 1) to contribute to building the 'bridge' between academia and healthcare providers by engaging high level decision-makers and thought leaders; 2) to create a taskforce of experts, researchers and healthcare organizations aiming at implementing a national training program on clinical communication.

This roundtable could be held in English or in Portuguese.

## 4
## Developing effective communication skill instruction and practice in resource impoverished settings

**Carey Candrian, University of Colorado School of Medicine**
**Kirsten Broadfoot, University of Colorado School of Medicine**

Topic and purpose of discussion: In an era of streaming, virtual reality, high fidelity simulation, expert led seminars and video offerings on communication skill development, it's easy to forget that not everyone has equal access to optimal instruction. Drawing on experiences across 4 different contexts with unique resource challenges we pose the question: If you were told there was no money, no additional time, and no Internet, what would your communication skill instruction and practice look like? Our aim in this roundtable is to generate discussion and elicit contributions from different perspectives on how to best serve all future health care professionals no matter their resource level.

Brief Outline of Session (60 minutes):

- Background (10 minutes)
- Small group discussion (World Café Crowdsourcing) on central questions (20 minutes)
- What is the optimal blend of real-time practice and instruction?
- How do you accomplish real-time communication practice in your environment given resource challenges?
- How can we design spaces and opportunities for instruction and practice in impoverished settings?

- If you were told there was no money, no additional time, no Internet, what would your communication skill instruction and practice look like?

- Large group generation of alternative approaches for effective communication skill instruction and practice (20 minutes)

- Compile repository of ideas to be shared and identify potential collaborations and initiatives (10 minutes)

Outcomes hoped for from the discussion:

- Gather diverse approaches to and experiences of delivering communication skills and structure in resource impoverished settings.

- Identify optimal and innovative combinations for low cost high access instructional methodologies.

- Develop collective repository of tools and approaches for effective communication skill instruction and practice in resource impoverished environments.

- Establish community of practices with interested colleagues to continue discussion and innovation around these ideas.


**5**
**Development of an intervention to train self-management support competencies in healthcare professionals**

**Veerle Duprez, Ghent University, University Centre for Nursing and Midwifery**
**Veerle Lemaire, University Colleges Leuven, Expertise Unit Healthy Living**
**Ilse Vandepoel, University Colleges Leuven, Expertise Unit Healthy Living**
**Ann Van Hecke, Ghent University, University Centre for Nursing and Midwifery**
**Dorien Wuyts, University Colleges Leuven, Expertise Unit Healthy Living**

The provision of self-management support (SMS) is internationally recognized as a core component of chronic care (WHO, 2014). SMS is a strategy to restore and strengthen the power and autonomy of the patient to ensure the **integration of the condition in the patient's life (CBO, 2014). Supporting patients with a chronic illness to take an** active role in the management of their condition requires healthcare professionals to have a variety of competencies on educational, supportive and communication level (Elissen et al., 2013). A need-supporting (Deci & Ryan, 2000) interaction is the basis of SMS. The healthcare professional and patient should become more equal **partners in the care process, which is attuned to the patient's needs and demands the professional to drop the** expert-role. Healthcare professionals experience difficulties in providing SMS to patients. To date, the most effective method to train competencies in SMS is unknown (Duprez et al., 2016).

The University Centre for XX and the Expertise Unit XX collaborate on the development and evaluation of a SMS training intervention for healthcare professionals. This intervention is based on the 5A-model (Whitlock et al., 2002), the Self Determination Theory (Deci & Ryan, 2000) and the Presence Approach (Baart & Grypdonk, 2008).

The Roundtable starts with an overview of current practice and the determinants of SMS performance.

Next we invite the public to discuss the following topics:

1. How can we enable an attitude shift in the healthcare professional towards a more autonomysupportive relationship with the patient?

2. Which SMS core competencies should be included in the training?

3. **Which didactical methods (e.g. role play, video feedback, group discussion, … ) are most appropriate to** train these complex competencies?

4. How can we help healthcare professionals to integrate SMS in their daily practice in order to strengthen self-management of the patient?

5. **What's a feasible assessment method to measure training outcomes?**

Our creative roundtable format will encourage all participants to contribute to the discussion. This discussion will result in new insights for experts with interest in training of SMS, and related domains such as autonomy-supportive communication, shared decision making and motivational interviewing.

**6**
**E-consultations (e-cons)**

**Anette Grønning, University Of Southern Denmark**
**Ditte Laursen, The Royal Library National Library of Denmark**
**Maja Klausen, University of Southern Denmark**
**Elisabeth Assing-Hvidt, University of Southern Denmark**
**Line Simonsen, University of Southern Denmark**

Digital consultations were introduced as a cost-effective and convenient means of obtaining quick access to the general practitioner (GP), primarily for renewal of prescriptions, communication of tests results and for quick questions. However, little is known about the way that patients and GPs use and experience digital consultations. As a form of communication with different constraints than face-to-face communication, digital consultations are likely to afford some benefits and to present new challenges. Successful communication between patients and their own GP is essential for the relation between patients and GPs and for correct medical decisions.

In 2009, it became mandatory under Danish law for all GPs to offer digital consultations. In 2015, the number of digital consultations had risen from 11,000 in 2003 to 5.6 million, corresponding to 15% of all GP consultations (PLO 2016). Aged patients (65–89 years) participate in these digital consultations with the highest frequency. Furthermore, the figures show that the highest annual increase of e-cons per patient stems from patients aged 70 years or older (Boysen 2016). These figures raise important questions on how media and digital technologies influence senior citizens' everyday lives and their relations with their GP.

We are about to start a research project (pilot project will be finished this summer) that runs from 2018-2022 about this topic and we would like to discuss it with researchers from other parts of the world. We are an already established (small) group of researchers from health and humanities. Our overall research question is as follows: How do digital consultations influence the roles of the aged patient, the GPs and their asymmetric mutual relation? With this Roundtable discussion we hope to establish networking and to gather information about e-consultations in an international perspective.

Brief outline of session:

Short presentation of the participants (5 minutes)

Introduction of the theme and research questions etc. (5 minutes)

Three quick questions about the influence of media and digital technology (20 minutes)

Discussion of how to gather information across countries about e-cons (15 minutes)

Appointment of contacts from as many countries as possible (10 minutes) Round off (5 minutes)

**7**
**Enhancing multidisciplinary communication in oncology settings.**

**Mark Leys, Vrije Universiteit Brussel - Department of Health Sciences - OPIH**
**Melissa Horlait, Vrije Universiteit Brussel - Department of Health Sciences - OPIH**

Topic for discussion. At the ICCH 2017 in Baltimore, we initiated an interest group (IG) with regard to the subject of communication skills (training) in oncology. There was considerable interest of the participants to further engage in the issue as good communication skills influence desirable outcomes for professionals as well as patients. Adequate (training) interventions to strengthen communication skills in oncology settings worldwide are considered as needed. For this roundtable discussion, we want to further specify the topic of skills for multidisciplinary communication, more particularly we will discuss barriers and facilitating factors to enhance multidisciplinary communication in oncology meetings.

Purpose. The IG aims at developing an international network of oncological practitioners, people responsible for training programs (basic medical training, specialized training in oncology, and continuous training for specialists involved in oncology) and researchers in oncology. Within this network we want to expand and strengthen the knowledge on acquiring communication skills by sharing international experiences of developing trainings and interventions. The purpose of the meeting is to scope the agenda of future collaborative (research) activities of the group and soliciting active engagement in writing an international research proposal.

Brief outline of the session. First, there will be a short introduction round for new members and a brief overview of the past activities of the IG. Then, we will open the discussion around the research evidence on multidisciplinary communication in oncology. We will continue with an open ended reflection discussion on possible strategies to put the topic on the international research agenda.

Potential outcomes. We aim to attract practitioners as well as researchers sharing experiences and research evidence on multidisciplinary communication in oncology and we hope to be able to conclude the meeting with active engagement of the participants for the outline a concrete international research proposal.

## 8
## Interprofessional Communication in Healthcare: When and how do we best equip our students?

**Anthony Brenneman, Carver College Of Medicine University Of Iowa, Usa**
**Susanne Lindqvist, University of East Anglia**
**Thanakorn Jirasevijinda, Weill Cornell Medicine**

Topic and Purpose:  Interprofessional Education (IPE) occurs "when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes." Current literature involves discussion on the need for IPE, but there is less focus on the actual communication skills needed within interprofessional teams and how these will improve collaboration and health outcomes. Many studies describe interventions that occur during clinical placements where students work in already formed teams, potentially perpetuating poor communication and team interaction. Discussions commonly evolve around when IPE should be introduced to healthcare students, and how interprofessional collaboration is best facilitated.

Communication is central to interprofessional learning. The purpose of this discussion is to encourage global exchange and collaboration among participants concerning current models and ways to approach potential challenges in IPE, specifically focusing on communication. Potential for ongoing and/or collaborative and future educational scholarly outcomes may also develop.

Brief Outline:

1. Introduction and brief overview of current literature. (5 - 10 minutes)

2. Discussion of topics: (50 – 55 minutes)

- When should IPE be introduced?

- What skills underpin successful interprofessional communication?

- How do students currently learn these skills?

- How is interprofessional communication highlighted?

- What approaches are more effective?

- What can we do to support educators?

- What research or scholarly activity will enhance the recognition of communication as central to IPE?

Anticipated Outcomes:

1) Identification of educational models that underpin successful interprofessional communication.

2) Increased awareness of how to incorporate interprofessional communication in student curriculum.

3) Shared best practices for teaching students to develop interprofessional communication skills.

4) Concrete plans on how to implement such approaches at participants' institutions.

5) Early formulation of research and/or scholarly activity to take forward.

Group Identification:  We are a new group formed from three institutions.

## 9
## Medical decision-making and informed consent – How to enhance practice?

**Julia Lühnen, University of Hamburg**
**Susanne Buhse, University of Hamburg**
**Justin T. Clapp, University of Pennsylvania**
**Lee A. Fleisher, University of Pennsylvania**
**Audrey Ferron Parayre, Univeristy of Ottawa**
**Anke Steckelberg, Martin Luther University Halle-Wittenberg**
**Alexandra Freeman, Winton Centre for Risk and Evidence Communication, University of Cambridge**

Topic: Whilst the legal requirements of informed consent and medical decision-making in general differ between countries, ethically the process should be the same. Initial studies on informed consent, however, suggest that it is not being achieved in any country. Studies repeatedly show that patients often do not fully understand what they have consented to. The paperwork surrounding informed consent is usually merely a legal adjunct to the process.

In order to make informed decisions, patients need to understand the relevant and evidence-based facts about their medical condition, possible therapeutic options or diagnostic measures, and their likely consequences – both potential benefits and harms. The medical decision-making process has not yet been fully explored. It is unclear when and how patients actually make their decisions, who else is involved, and thus when such information is best provided. Then there is the form of the information: decision aids are designed to provide the supporting framework for these decisions, but the best form for them will depend on how and by whom they are to be presented to the patients.

The aim of the roundtable discussion is to establish international collaborations to explore informed consent procedures in a co-ordinated way in different countries and to develop strategies to improve the underlying practice.

Organization: The roundtable will be organized by an international group of researchers in the field of decision-making and informed consent who address the topic from different perspectives. The collaboration was initiated by the Winton Centre for Risk and Evidence Communication, UK.

Session and Outcomes: The discussion will start with **a brief summary of the group members' previous work. The** idea is to develop a protocol to explore pathways of informed consent in the field of surgery in the different countries. The discussion will focus on the objectives of the exploratory trial and initial methodological considerations. In order to promote the project and to consolidate the working group a first draft of a study protocol including work packages and further meetings will be developed. Researchers who are interested in this field are very welcome to join the discussion and our group.


**10**
**Research and resources for workplace based communication learning**

**Marcy Rosenbaum, University of Iowa**
**Noelle Junod Perron, Geneva University Hospitals**
**Jane Ege Møller, Aarhus University**
**Katrien Bombeke, Faculty of Medicine and Health Sciences University of Antwerp**

While a significant amount of curricular time is devoted to communication skills learning in formal classroom sessions such as lectures and experiential small groups, studies continue to demonstrate that healthcare learners can have difficulty in transforming the acquired competencies into quality communication in real clinical practice and that during clinical training these skills can erode. Thus, the transfer of skills from the classroom to the workplace is a critical issue in health care education that merits further exploration by researchers and educators. The purpose of this session will be to engage participants in discussion of existing resources, questions and opportunities to understand and enhance workplace based learning and reinforcement of communication skills. This session will be facilitated by members of the tEACH workplace based learning subgroup.

Outline of session:

- Brief introductions of participants including facilitators (5 min)

- Brief summary of current state of research and education related to workplace based transfer and learning of communication skills (CS) (10 min)

- Questions to be discussed in relation to workplace based CS learning:
    - What research questions still need to be answered?

- o What methods would be useful for addressing these questions?

- o What resources are currently available to support this type of learning?

- o What are the barriers for this type of learning and how do we overcome them?

- o What kinds of resources would be helpful to collect and develop to enhance this learning?

- o What opportunities would people want to have regarding cooperation on research and/or educational projects related to workplace based CS learning.

Outcomes:  As a result of this discussion, participants will identify areas of focus related to workplace based communication learning that could be examined through collaborative efforts among educators and researchers. In addition, it will help identify ways the tEACH workplace based learning subgroup can help support these efforts.

## 11
## The VR-CoDES system – Applications and discussion of future directions in research and training

**Lidia Del Piccolo, University of Verona**
**Margarida Figueiredo-Braga, University of Porto**
**Gerry Humphris, University of St Andrews**
**Anneli Mellblom, University of Oslo**
**Arnstein Finset, University of Oslo**

The Verona Coding Definitions of Emotional Sequences (VR-CoDES) system was published in 2011 to analyse emotional communication in provider-patient encounters. (Piccolo et al., 2017). Since then, over 50 papers describe the practical application of VR-CoDES, present substantive findings and discuss underlying concepts.

The organizers (proponents) of this roundtable previously asked for contributions to an ongoing discussion on the use of the system and is illustrated by the publication in 2017 of a conceptual paper.  To increase dissemination, the manual was recently translated into Portuguese and Italian.  Chinese and German translations are in progress. However this will impose new demands, that is the cross cultural coding of less distinct emotional expressions and adaptation to linguistic particularities.  A summary presentation of the VR-CODES coding and published work will set the stage for the discussion.

Participants will be invited to share their experience with the system and discuss difficulties and challenges in 'real-life' application. The international design of the congress will convey the opportunity to gather dynamic and multicultural participation from attendees around the globe. Questions regarding the extension of VR-CoDES application to different settings (triadic conversations, veterinary, dentistry, psychiatry, psychotherapy) will be encouraged. Other potential discussion topics follow recent research on the association of objective measures (e.g. heart rate variability, skin conductance, speech prosody) of patient's emotional expressions and providers' responses. Some investigators are experimenting with AI approaches to identify emotional sequences using VR-CoDES.  We hope that new studies addressing the role of VR-CoDES in the study of outcome indicators such as satisfaction, distress and pain may be debated.

Organizers will elicit suggestions for linguistic appendixes, to guide coders and facilitate the identification and characterization of emotional concerns and cues, maintaining reliability and coherence. The use of the VR-CoDES system to give feed-back to learners of management of patients' emotions in real or simulated clinical encounters will also be explored. Interactivity of session will drive from different levels of experience in the use of the system, different settings and specific fields. The opportunity for informal discussion is expected to reveal new ideas and projects, and contribute to collaborations and synergies.

## 12
## Express Rather than Impress": Discussing Challenges in a Peer-group of Early Career Researchers

*Kasey Boehmer, Mayo Clinic*
**Marij Hillen, *University of Amsterdam***
**Eirik Hugaas Ofstad, *Nordland Hospital Trust***
**Jennifer Barton, *Oregon Health & Science University***
**Corine Meppelink**
**Claudia Zanini, Swiss Paraplegic Research and University of Lucerne**
**Tabor Flickinger, University of Virginia School of Medicine**

Background and Purpose:  Early career researchers face many challenges—such as securing funding, establishing peer collaborations, confronting doubts and uncertainty concerning research, and identifying career trajectories—and may benefit from discussing these issues with peers. Since 2011, the early career network (yEACH) has coordinated workshops that bring together early career researchers to discuss these challenges and provide constructive advice. Based on literature on early career challenges and feedback from previous attendees, we propose conducting a workshop at ICCH 2017 that focuses on these issues. **This workshop's content builds upon** previous delivery at the International Shared Decision Making (ISDM) Conference in 2013 several ICCH conferences, **refining content to best meet participants' various expressed needs.**

Learning Objectives:

1)      Master the principles of peer-to-peer support in research and career development.

2)      Share and receive constructive feedback on research and career challenges.

3)      Develop networking skills and build international support networks.

Methods/Materials:  Participants will select attendance in advance, and those who wish to maximize participation will submit a short description of current challenges to facilitators in advance. We will use focus areas to organize participants into small groups. Small groups will engage in facilitated activities, using slides and worksheets to address their needs. Ideally, this workshop will be delivered early in the conference agenda, either as a pre-conference, or during the first day, such that participants have the opportunity to continue networking throughout the remainder of the conference.

Small group focus areas may include:

1)      Research/Methods: ongoing research projects and methodology.

2)      Career Development: mentorship, personal-professional balance, transitions, etc.

3)      **Networking: developing "elevator speech," identifying collaborators,** etc.

Evaluation Description: At the end of this workshop, we will evaluate **participant's experience using a structured, written evaluation** that we have used at the conclusion of previous workshops to improve on future workshops.


**13**
**ACH-EACH Roundtable: Keys to successful research collaboration**

**Arwen Pieterse, Leiden University Medical Center**
**Orit Karnieli-Miller, Tel Aviv University**
**Barbara Schouten, University of Amsterdam**
**Pål Gulbrandsen, University of Oslo**
**Russell Rothman, Vanderbilt University Medical Center**
**Kenzie Cameron, Northwestern University Feinberg School of Medicine**

This roundtable invites you to share your experiences with collaboration in research, of all kinds: between various academic disciplines, between institutions and regions, between those with different foci of expertise in the overall field of patient-provider communication (e.g. medical decision making, shared decision making, health literacy, heath information, patient experience), between practitioners and researchers. We will divide into smaller groups facilitated by discussants from EACH and ACH. The aim is to learn tips and tricks to set up and sustain collaborations, to make them fruitful, and to enjoy the experience.

The following topics will be used to stimulate discussion:

- How to identify promising collaboration partners?

- Cultural differences between different academic disciplines, regions, practitioners and researchers

- How to develop working relationships, e.g., what products to work on, how to set up an maintain contact (e-mail, teleconference, in-person meetings), how to divide the work, and how to manage time

- What challenges can you expect, and how to alleviate barriers

This will be the first joint roundtable event organized by the research committees from EACH and ACH. We hope to stimulate the participants to consider possibilities for more collaborations and/or invigorate existing collaborations.

## Oral Presentations

### O.22.1
### Digital Healthcare Communication: Internet versus Virtual Reality Platforms

**Susan Persky, National Human Genome Research Institute**
**William D. Kistler, National Human Genome Research Institute**
**William M.P. Klein, National Cancer Institute**
**Rebecca A. Ferrer, National Cancer Institute**

Background: Face-to-face, clinic-based models of genomic information transmission are unlikely to be sufficient to handle large-scale clinical integration of genomic technologies, as may occur in future healthcare contexts. Thus, genomics represents an important case wherein adoption of digital platforms for healthcare communication is strongly anticipated. Researchers and practitioners envision a future of internet-based, distributed communication approaches in this arena. The emerging and increasingly affordable consumer communication platform of virtual reality (VR) is another potential intermediate approach between face-to-face and distributed internet platforms to conduct genomics education and information provision.

Methods: The current study assessed whether provision of genomics-oriented information about weight (versus standard behavior-related information) in a simulated, VR-based consultation (relative to a distributed, internet platform) would be associated with differences in patient health attitudes and beliefs, and interpersonal reactions to the avatar-physician. Although a simulated provider can be presented in both settings, VR was anticipated to make the digital provider feel more immediate and socially present within the interaction, resulting in gains for interpersonal ratings.

Findings: There were significant differences between VR and internet settings for all health behavior-oriented outcomes such that participants reported greater self-efficacy for weight loss [$F_{(1, 498)}=30.96$, $p<.0001$], intentions to improve diet [$F_{(1, 498)}=12.04$, $p<.0001$], and intentions to improve exercise behavior [$F_{(1, 498)}=12.66$, $p<.0001$] in the VR setting versus the internet-based setting. Surprisingly, there were no differences in trust of the avatar-physician by setting, and no interaction between setting effects and information content.

Discussion: The current study was a first attempt to examine the potential capabilities of VR-based communication settings for conveying genomic content. Although more research is needed, there may be benefits to VR settings for communication about genomics as well as traditional prevention-oriented health information, for the attitudes and beliefs that underlie healthy lifestyle behaviors. In addition, as VR technology grows and develops, these approaches may be increasingly distributable into home and community settings.

### O.22.2
### Effectiveness of a novel Internet Intervention for the reduction of alcohol consumption in adults (Vorvida): Results of a randomized controlled trial

**Jördis Zill, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Eva Christalle, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Björn Meyer, Department of Psychology, City, University of London**
**Martin Härter, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Jörg Dirmaier, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**

Background: Harmful alcohol consumption is a major global health concern. This study evaluates the effectiveness of the cognitive behavioral Internet intervention *Vorvida* in the reduction of alcohol consumption.

Methods: 608 adults were recruited in Germany and assigned to a two-arm pragmatic randomized controlled trial (RCT). The *Vorvida* program employs a computer-tailoring approach in which the program interacts in a 'simulated dialogue' format as an "expert" with the user and conveys primarily evidence-based cognitive behavioral therapy techniques. Assessments were conducted at baseline (t0), three months (t1) and six months (t2). Self-reported alcohol consumption as primary outcome was compared between the intervention group (IG) and a care-as-

usual/waitlist (CAU/WL) control group after three months (t1). Intention to treat (ITT) and completer analyses were performed.

Results: Of 608 participants, 458 (75%) completed the assessments at t1 and 425 (70%) t2. ITT and completer analyses revealed significant reductions in alcohol consumption with small to large effect sizes from d=0.339 to d= 1.4, which were shown both at t1 to t2. Subjective satisfaction with the program was very high.

Conclusion: *Vorvida* was effective in reducing alcohol consumption among problem drinkers. The program could serve as an adjunctive or stand-alone treatment tool for adults with risky or harmful drinking.

### O.22.3
### Positive Voices: Addressing HIV Stigma through Participation in the Positive Peers Mobile Application

**Mary Step, Kent State University College Of Public Health**
**Theodore Russell, Kent State University College Of Public Health**
**Ann Avery, Metrohealth Medical Center**

Background: The *Positive Peers* mobile application provides:

1) youth oriented HIV information,

2) community forum and private chat functions,

3) local resources for transient and underserved youth, and

4) a personal health tracker

Our objective is to retain app users in care, reduce stigma, and create a supportive local community of in care young adults living with HIV. After 18 months in the field we wished to know how users perceive the app and how it may contribute to our stated objectives.

Methods: Intensive and iterative interviewing was conducted with 20 application users to address the research questions. All participants were between 18-34 at the time of the interview and reported multiple minority status. Transcripts constructed from digital audio of the interviews were used for analysis. Grounded theory was used to analyze the data.

Findings: Most participants highly valued the application despite infrequent use. Participants expressed an experienced tension between their need for connection with other HIV positive people and concern for protecting their HIV status from disclosure. Application anonymity facilitated communication process by neutralizing first impression fears, establishing similarity, and ultimately building trust. Consequently, the application was valued as a general linkage to a larger community.

Discussion: Frequency of use may be an inadequate construct for evaluating mobile application effectiveness. Monitored, rule bound communication via an anonymous forum appeared to facilitate relationship development and trust among young people using the application. This type of communication may reduce stigma and be effective at addressing health care disparities in HIV.

### O.22.4
### Promoting Safe Medication Use in Communities via Health and Consumer Technologies: A Systematic Review

**Michael Wolf, Northwestern University**
**Amy Moore, Northwestern University**
**Stacy Bailey, UNC-Chapel Hill**
**Ruth Parker, Emory University**

Background: In recent years, technological solutions have been increasingly leveraged to promote safe medication use in the community. The objective of this literature review was to understand what has been studied to date on the topic of community-based, technology-enabled interventions aimed at promoting safe medication use.

Methods: A systematic literature review was undertaken to document the evidence available of the efficacy or effectiveness of various healthcare system and home-based interventions aimed at promoting safe medication use. A search of the literature was conducted in PubMed, CINAHL and Embase in October 2017 to identify articles for the review.

Results: After an initial capture of 1,610 unique studies, 582 were considered for abstract review. This stage yielded 31 unique trials specific to medication safety, of which 10 records were eligible for inclusion for full article review. Findings from medication adherence trials (N=30) were also summarized given the relevance to safe medication use. As available consumer and health technologies are rapidly changing, ongoing medication safety trials that met study eligibility criteria (N=36), were also identified. The most common technology platforms in use were interactive voice response (IVR) and SMS text. Studies also applied electronic monitoring devices, web-based self-management programs, and electronic health record (EHR)-linked strategies. One trial implemented an artificial intelligence (AI) program to track medication use. More common with ongoing medication safety trials was the use of mobile applications ('apps'). Limited information was available on the inclusion of patients in the design of interventions, as well as specific facets of each intervention. Certain features that were more common among interventions yielding improvements included 1) reminder functions, 2) patient feedback on behavior, 3) shared communication with a healthcare provider. Stand alone, web-based self-management programs were less successful. EHR-linked tools demonstrated potential in the few studies for review.

Discussion: There is a significant opportunity to expand this field which is just now taking hold with several trials underway, in terms of the type of technologies that could be applied, whether alone or bridging to existing healthcare system tools. Standards are needed for reporting on evaluations of technology-enabled interventions to promote medication safety.

## O.22.5
## To what extend do allergy-specific online tools meet quality criteria for e-health?

**Jonas Lander, Hannover Medical School**
**Karin Drixler, Freiburg University of Education**
**Eva-Maria Bitzer, Freiburg University of Education**
**Marie-Luise Dierks, Hannover Medical School**

Background: Digital health information may be particularly relevant in the field of allergy and asthma, as many individuals may not regularly seek treatment, do rely on self-treatment, or read information online. Our aim was to assess a sample of allergy-specific "online coaches" – i.e. interactive, feedback-oriented online training platforms to promote health-behavior change – regarding a) general characteristics, aims, and target groups and b) extent to which these tools provide evidence-based information according to current (online) health information quality standards/criteria.

Methods: An initial search in three popular search engines was conducted to select relevant online coaches according to the above-outlined description. This was complemented with a search in English (UK, Canada, US, Australia) and German websites of medical and public health services such as European Centre for Allergy Research Foundation (German), Asthma UK, and Anaphylaxis Canada.

To analyze interventions, we developed an assessment matrix based on a) established guidelines for online health information (JAMA Benchmarks; DISCERN criteria; HON code; German Network for Evidence-based health information) and b) online coach reviews. The items covered aspects related to a) content (completeness, transparency, evidence-based), b) structure (data safety, qualification of trainers/authors) and c) impact (effectiveness, user-perspective, integration into healthcare). Three researchers independently analyzed interventions.

Findings: Allergy-specific online coaches (n=15) vary considerably regarding structure, transparency, quality, and comprehensiveness. 'Basic' aspects such as a description of allergy symptoms addressed (100%), and provider contact information (67%) are reported frequently. Further aspects, such as a) full information of sources/references (47%), b) regular update of information (53%), c) information regarding financing and potential conflict of interest (33%); d) possibility to contact a professional for questions (13%) and e) data safety (60%) are reported much less frequently and with varying degrees of transparency and completeness. Moreover, 53% assessed user-satisfaction but only 2 interventions (13%) mentioned that the actual impact/effectiveness was measured. 47% assessed if users completed all parts of the intervention.

Discussion: Allergy-specific online coaches should be based much more thoroughly on quality criteria and available evidence. The inclusion of user perspectives on content, methods, quality, and transparency seems important for developing and implementing respective services.

## O.23.1
## Coping with uncertainties by turning to the Internet:
## The role of patients' trust in physicians

**Elena Link, University Of Music, Drama And Media Hanover**
**Eva Baumann, University Of Music, Drama And Media Hanover**

Background: A fundamental component of the patient-physician relationship is trust. From a medical perspective, trust is linked to the patients' satisfaction with a physician and compliance with treatment recommendations. From a communications science point of view, trust can be interpreted as a strategy of uncertainty management (Brashers, 2001). Depending on the severity of illness, the diagnosis of a disease is accompanied by more or less uncertainty. The individual aims to manage this state of discomfort by communicating and gathering information, e.g. from the Internet, or by turning to health professionals. Trust might be a crucial link in this context. To deeper understand this, we aimed to clarify how the patients' perceptions of uncertainties and related information behaviors are related to their trust in physicians.

Method: According to the exploratory research objective, a qualitative research approach was chosen. We conducted semi-structured interviews with 34 patients (aged between 42 and 88 years; 19 females) after a knee or hip implant surgery. We chose this subject of research, because the diagnosis calls for action and the patients' involvement in decision making about type and timing of treatment options is relatively high; as a consequence thereof, there are many occasions and opportunities to develop informational needs and to seek information from various sources.

Findings: The interviewees reported to place a lot of trust in their physicians, and trust seemed to influence both the extent and the type of perceived uncertainties. A high level of trust was associated with lower levels of uncertainties, information needs and online information seeking behaviors. In contrast, a lack of trust can be interpreted as a trigger for gathering information from the Internet. Depending on the strength of trust in physicians, using the Internet can be unimportant, plays a minor role as a complementary source or provides substitutive functions.

Discussion: The findings reveal the importance of trust to deeper understand the complex mechanisms between patients' perceived uncertainties, their information needs and seeking behaviors. The results further reveal that the role of different sources of information should be investigated in their interrelationships, not separated from each other.

## O.23.2
## Different platforms for different patients' needs: Automatic content analysis on health platforms

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Background: Patients increasingly use the Internet to fulfill cognitive and affective needs (from now on 'social support needs'). Research on seeking online health information focuses mainly on the predictors or outcomes of using online health information, leaving online health information itself an umbrella term, encompassing different online platforms (i.e., expert- vs. peer-generated). These platforms have the potential to fulfill different social support needs, but to the best of our knowledge, no previous studies investigated if and how content differs on these platforms. To get more insight in which social support needs are fulfilled on different platforms, this study aims to investigate differences in content between different platforms.

Method: First, a model of patients' social support needs was developed. These needs can be fulfilled by receiving/discussing different kinds of social support on peer- and expertgenerated cancer related platforms, i.e., informational support, esteem support, network support, and emotional support. Second, data from a large Dutch cancer website (kanker.nl) was analysed. Using topic modeling ($N = 52.990$), topics within expert- (i.e., medical library & expert questions) and peer-generated platforms posts (i.e., patients' blogs & forums) were analyzed and matched to the initial model. To test differences between platforms, a MANOVA was conducted.

Findings: 25 social support topics were found, matching most of the topics of the initial model. These social support topics covered cognitive and affective needs. Some topics were added to the model, e.g., 'sharing status'.

Results showed differences in the topics between and within platforms. Although peer-generated platforms, as expected, covered more affective needs, and expertgenerated platforms covered more informational topics, all platforms had the potential to fulfill both needs but in different patterns. For instance, on expert-generated platforms the emotional impact was discussed in a general way (e.g., general tips how to reduce stress), while on peer-generated platforms more specific and personal interaction was found (e.g., sharing feelings of anxiety).

Discussion: This study shows the usefulness of conducting topic modeling based on a theoretical framework. Understanding differences between platforms helps patients to find the right platform for their needs, and providers to direct patients to the relevant platforms.

## O.23.3
**Heuristics and rationality in patients' risks appraisal: from theories to healthcare practice**

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**Brian Taylor, Institute for Research in Social Sciences, University of Ulster**

Background: Risk is an essential component of communication between patients and health and social care professionals. Risk perceptions are more important than actual risks in predicting behavior such as patient decisions in response to risk communications. Perceptions can be significantly influenced by heuristics, that is by shortcuts that simplify and reduce the cognitive burden of deep thinking and assimilating large amounts of diverse information. The aim of this paper is to examine how heuristics by patients can act as a facilitator or a barrier to optimal response to risk communication.

Methods: This presentation is based on narrative review of theoretical frameworks from the cognitive, behavioural and social sciences. It is rooted in the dialectics of authors including Brighton and Gigerenzer versus Kanheman and Tversky. The theoretical frameworks are illustrated on the basis of evidence from risk communication in patient-professional interaction.

Findings: In risk situations, patients' decisions do not seem to be based simply on an estimation of the hazard, the exposure and the probability of harm. Theories of heuristics of decision making explain how human beings may act rationally even if they do not weigh up all the factors according to the logic of an expected utility model. Rather, the rationality may consist in selecting and using simple decision rules related to particular types of life problems that are faced – including responses to health risk communications. There are contexts, however, where heuristics may lead to cognitive biases, that is to errors in thinking that negatively impact on risk perception and care decisions. Risk perception is significantly influenced by context and – specifically - by intuition, experiential thinking and emotions.

Conclusion: Models of risk communication by health and social care professionals need to consider and address patients' decision heuristics to be effective. Theories of heuristics can both challenge and complement current approaches to risk communication from the field of patient education and health literacy. They show that health information alone is not a sufficient base for optimal health decision-making, but its framing and the context of knowledge, beliefs and social environment of the patient can influence risk perception and health decision making.

## O.23.4
**Patients' barriers to discuss online health information**

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Background. Patients use the internet for self-diagnosis or to determine which treatment they prefer. Providers need to be aware of the information on which the patient is basing his/her decision. Many studies have however indicated that patients do not discuss online health information with their provider. Few studies explored patients' perceived barriers regarding discussing online health information. Knowledge is lacking on how often these barriers actually occur in consultations and how influential they are. This study identifies the most influential barriers to discuss online health information by examining patients' reports of perceived barriers and perceived occurrence of barriers in GP consultations.

Methods. A literature review, interviews (N=10) and an online survey (N=274) were conducted. Interviews were conducted to explore new barriers not described in the literature. The online survey measured patients' perceived barriers and occurrence of barriers in consultations. Patients were recruited from a consumer panel who reported to have used the internet for health related reasons at least once in the past year. Quality Impact Indices (QIIs), were calculated by multiplying the scores on the perceived barriers with the fraction (100%) of participants that indicated that the barrier occurred. A QII score of .60 or more indicated a potential barrier and a QII score of 1.75 or more an influential barrier.

Results. Three type of barriers were distinguished based on the literature review and the online survey: patients' information attributes (N=6), resources (N=3), provider attributions (N=9), patients' face-saving reasons (N=5). Most influential barriers were related to patients' information attributes (the information was consistent with what their GP told them (QII=2.25), information was not relevant (QII=2.28)) or related to resources (other problems they rather wanted to discuss (QII=2.01)).

Conclusion. The results indicate that the most influential barriers are barriers relating to the information that the patient had found and the attributions made about the information. As the accuracy of these attributions is unknown, this may be a barrier for patient-provider communication, especially for patients with limited health literacy. Results can guide intervention development that focus on facilitating discussions about online health information and reducing perceived barriers.

## O.23.5
**What does it take to critically appraise health information? An interdisciplinary scoping review.**

**Nicola Diviani, University of Lucerne**

Background: Consumers often find themselves flooded with health information of varying quality coming from countless sources. Researchers and policy makers are increasingly aware of the issue and acknowledge the importance for citizens and patients to be able to critically appraise health information (i.e., to possess an adequate level of critical health literacy). Yet, it is not clear what are the specific skills one would need to adequately accomplish this task, making the development and evaluation of communication interventions in this field difficult. This study aims to identify the skills that health information appraisal requires, by scoping conceptualizations, operational definitions, and measures of information appraisal that have been proposed in different disciplines (health communication, media studies, education, psychology, and philosophy).

Methods: A scoping review of the literature was conducted. Five academic databases were systematically searched and the search was repeated on Google to identify grey literature. Subsequently, two independent coders screened and selected abstracts and full-texts, extracted relevant skills, and categorized them using thematic analysis.

Findings: A total of 26,903 records were identified. After deduplication and preliminary title and abstract screening, 370 articles were retained for full-text review. The final sample consisted of 104 documents, which mentioned a total of 646 skills. Three main categories were identified: information-related skills (e.g., the ability to identify biased information), source-related skills (e.g., the ability to evaluate the credentials of a source), and scientific skills (e.g., the ability to evaluate the quality of a scientific study). In most cases, however, the description of the skills was abstract, not mentioning the concrete actions they entail or which indicators could be used to assess them.

Discussion: The review has shed new light on a crucial, yet understudied, health literacy domain, thus contributing to the theoretical clarity of the concept. It also provides a first basis for the development of theory-based tools to measure health information appraisal and for the design of communication interventions in this field. Before being able to do that, however, further research involving consumers, patients, and healthcare providers is needed to translate the abstract skills described in the literature into actionable and measurable ones.

## O.24.1
## Cost Conversations between Older Adults with Cancer and their Caregivers and Oncologists in the United States

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**Marie Flannery, University Of Rochester**
**Supriya Mohile, University Of Rochester**

Background:  Financial Toxicity (FT) is a serious and distressing concern for the geriatric oncology population. However, communication about FT between patients, caregivers, and oncologists has not been well examined. This study aims to describe the prevalence of FT and examine conversations about FT and the recommendations.

Methods:  349 patients were recruited from a cluster- randomized study in the University of Rochester NCI Community Oncology Research Program. The baseline oncology visit was audio recorded then transcribed. Sixty patients (17%) met criteria for FT (delaying medications due to cost OR not having enough income for food and housing OR other basic needs), of which 58 transcripts were available for review. Transcripts were reviewed by two independent coders for 1) discussions of cost, 2) who initiated the discussion, 3) themes discussed, and 4) whether providers intervened with recommendations.

Findings:  Thirty-one transcripts had discussions concerning costs. Providers initiated conversations in 19 encounters, while patients/caregivers initiated in 12. Themes included 1) statements about cost of care (medications and medical equipment) e.g., "We don't have no $480 a month" (copay for Capecitabine) 2) questions on ability to afford prescribed care e.g., "So how much are you paying out of pocket?" 3) effects of cost of care on ability to work and provide for family e.g., "I've got a wife and two daughters and a granddaughter that I'm supporting", and 4) cost burden in non-treatment domains (transportation, food and supplements) e.g., "I said that (meal delivery) was a waste of money. That's why I told her to cook for me". Providers acknowledged cost concerns in 27 encounters, but only intervened in 14 (by providing medication samples, prescribing generic medications, and/or connecting patients/ caregivers with social workers/ financial resources).

Discussion:  Findings demonstrate that although FT was present, it was only discussed in about half of visits, and oncologists provided interventions 30% of the time, revealing profound missed opportunities for conversations and interventions. Themes revealed a wide range of financial concerns for older adults receiving cancer treatment. It is imperative to design and implement tools oncologists can utilize to facilitate discussions and potentially alleviate FT for older patients.

## O.24.2
## Evaluation of a Patient-Centered After Visit Summary in Primary Care

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Background:  The after visit summary (AVS) summarizes key elements of outpatient visits. The AVS can be used by clinicians to reinforce, clarify, and promote retention of information important to the patient's health and self-management. Unfortunately, the AVS produced from many electronic health record (EHR) platforms have design flaws that may limit their utility. The purpose of this study was to design a patient-centered AVS that follows best practices for communication via print materials, and to test its impact on patients' and clinicians' ratings and use of it.

Methods:  The redesigned AVS was developed through multiple patient and provider focus groups and individual semi-structured interviews. It was then tested in an adult primary care practice in New York City and compared to a control practice that used the same EHR and had a demographically similar patient population. Ratings and use of the AVS were tested in difference-in-differences (DiD) analyses.

Findings:  We interviewed 118 and 98 intervention site patients in the pre- and post-intervention periods, respectively, and 99 and 105 in the control site.  Subjects averaged 50 years of age, 53% had no college education, and 18% had limited health literacy. Patients in the intervention site were more likely to have received an AVS from a clinician (p=.002) and to report using the AVS as a reminder to take medications (p=.004), but they perceived it as too long (p=.04). There were no significant changes in ratings of its clarity and content. There were no differences in clinicians' use of the AVS, including reviewing it with patients, and their overall rating of the AVS did not change.

Discussion:  Introducing a redesigned AVS improved its usefulness to patients but failed to promote behaviors that might enhance patient-provider communication. Further design enhancements may be needed to optimize use of this potentially effective communication tool.

## O.24.3
## Identifying and characterizing patient statements that convey potential willingness to discuss changes to opioid analgesics in primary care

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Background: Clinical guidelines discourage prescribing opioid analgesics for chronic pain, yet physicians report patients often insist on taking opioids. Study objectives are to identify and characterize patient evaluations (i.e., value judgments) about opioids uttered during primary care visits, and to identify the subset of evaluations that signal potential opportunities for physicians to discuss changes or alternatives to opioids.

Methods:  Primary care visits involving 30 adults taking opioids for chronic musculoskeletal pain in 2 academic clinics were video recorded and transcribed. Investigators reviewed data until they could reliably identify both patient evaluations concerning opioids and patient endorsements of opioid-related side effects.  Two investigators independently identified patient evaluations and side effects during each visit. Disagreements were resolved by discussion. Evaluations were analyzed to identify common themes indicating potential opportunities for discussing changes or alternatives to opioid analgesics.

Findings:  87 percent of visits (n=26) included ≥1 patient evaluation about opioids (median 2 per visit). Evaluation themes judged to indicate potential opportunities for discussing changes or opioid alternatives were: unpleasant side effects ("higher doses give me brain fuzz"), safety concerns ("I don't want to die"), lack of effectiveness ("not even morphine touches the pain"), tradeoffs between opioid use and functionality ("hard to regulate my activities without medication"), and uncertainty about opioids

("oxycodone hasn't solved anything yet"). Seventy percent (n=21) of visits included ≥1 evaluation identified as a potential opportunity for discussing changes or opioid alternatives. Two-thirds of patients endorsed ≥1 opioid-related side effect; one-fifth endorsed ≥3 side effects.  The most commonly endorsed side effects were constipation, dependence, and other gastrointestinal problems.

Discussion: During primary care visits, most patients taking opioids for chronic pain endorse some opioid-related side effects and utter ≥1 evaluation about opioids that signals a potential opportunity for discussing changes to opioid medications. Further questioning could identify the subset of patients making such statements who are open to changes in their opioid regimen. Training physicians to listen for and follow up on patient evaluations of opioids and opioid-related side effects may be a promising, patient-centered strategy for improving pain control and, ultimately, for reducing the use of opioids for chronic pain.

## O.24.4
## Pharmacogenetic testing in child and adolescent psychiatry: Caregiver attitudes, uncertainty management, and communication support needs

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**Robyn Nelson, University Of Florida**
**Carol Matthews, University Of Florida**

Background: Pharmacogenetics, an application of personalized medicine and the practice of using genetic testing to inform decisions about medication choices, is rapidly growing. Pharmacogenetic testing (PGx) is becoming more affordable, but its implementation from clinical research to practical care is challenged the complex nature of the test and its results. In psychiatry, PGx can inform treatment choice and minimize possible medication side effects from antidepressant (AD) medications. For this novel area of medical knowledge, patients rely on healthcare providers to disseminate and translate existing knowledge. Yet, most physicians still lack sufficient knowledge and experience with PGx, which can lead to inability to translate the risks and benefits to patients participating in pharmacogenetics testing. Therefore, the objective of this study was to assess caregiver perceptions and provide guidance for patient-provider communication related to child and adolescent PGx testing and treatment decision-making.

Methods: This study assessed attitudes toward PGx among caregivers of children and adolescents (N=17) seen at an academic psychiatry practice, who were offered an opportunity to obtain and use PGx information as part of a larger clinical trial.

Guided by the uncertainty management theory (Brashers, 2001) and mental models approach (Morgan, 2002), the researchers interviewed caregivers on their understanding of PGx, its risks and benefits, and the intended use of PGx information for psychiatric medication decision for children in their care. Interview data were analyzed using directed qualitative thematic analysis approach and axial coding (Hsieh&Shannon, 2005).

Results: Caregivers displaced one uncertainty, AD medication treatment, with opportunity-oriented uncertainty about PGx test results. As expressed by caregivers, benefits of PGx applied to the possible certainty of AD treatment outcomes, while risks related to PGx information itself (its privacy and possible future incidental findings). We also observed bundling of a decision to undergo PGx with the decision to start AD medication treatment.

Discussion: Caregivers need expert support in understanding possible inconclusive results of PGx tesing as well as translating PGx results into knowledge that can internalize. Families also need support (most likely, time outside of a clinical encounter) to deliberate about PGx and understand its utility for their decisions to initiate AD treatment.

## O.24.5
## Supportive Communication in Home Care: A Cross-national Comparative Study

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Background: In home care, person-centred communication is essential **to understand patients'** needs and provide emotional support. Acknowledging and legitimising negative emotions is an effective way of addressing worries and distress. The aim of the study was to explore supportive communication in home care in two Nordic countries.

Methods: The study had a cross-sectional design. The sample included 384 audio-recorded home-care visits, including 129 older persons and 64 nursing staff in Norway and Sweden. The age of the older persons ranged from 65-103 years. We defined supportive communication in three levels, as: i) ignoring, ii) implicit recognising, and iii) explicit recognising the **patients' emotional perspective, based on the older persons'** expressions of emotional distress and subsequent nursing staff responses as identified by Verona Coding Definitions of Emotional Sequences. The data was analysed using standard statistical tests, a p-value of 0.05 was considered significant.

Findings: We identified 957 nursing staff responses, 316 and 641 in the Swedish and Norwegian sample, respecti**vely. In all, 622 (65%) responses recognised the patients' emotional perspective, by implicitly 492 (51.4%) or** explicitly 130 (13.6%) addressing the emotional expression of distress. In 335 (35%) responses, the nursing staff did **not recognise patients' per**spective. There was a significant difference in responses between Norwegian and **Swedish nursing staff. Swedish nursing staff more frequently recognised the patient's perspective by providing** space for further disclosure (75% versus 60.1%, $\chi2$ =20.76, p<0.01)**. When recognising the patient's perspective,** Swedish nursing staff more often did so by implicit recognition of the emotional distress (90.3% versus 72.2%, $\chi2$ =20.03, p<0.01) than Norwegian nursing staff did. Norwegian nursing staff more frequently responded to the

content of the distress (32% versus 22.2%) or blocked/ignored the expression (20.6% versus 9.2%), whereas Swedish nursing staff more often responded to the emotion expressed (68.7% versus 47.4%), $\chi2$ =20.76, p<0.01.

Discussion: In our study, Swedish nursing staff showed a higher level of supportive communication than Norwegian nursing staff. Future research should explore this discrepancy to increase understanding of communication in home care. This knowledge may have an impact on training of nursing staff and provision of home care.

## O.25.1
## "It's just second nature": Evolving Confidence and Concerns of Ventricular Assist Device Patients

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Background: Patients with end-stage heart failure who receive a mechanical heart pump known as a ventricular assist device (VAD) must learn self-management skills to ensure their safety. Although patients receive substantial training, little is known about patients' concerns and confidence levels about self-management skills and adjustment to life with a VAD. We sought to identify and describe patients' concerns and confidence levels after VAD surgery.

Methods: We conducted semi-structured interviews until saturation was achieved (n=16 post VAD surgery patients). Our interview guide prompted patients to reflect on their individual concerns and confidence since hospital discharge. Interviews were digitally recorded, transcribed, and analyzed using a two-phase open and axial coding strategy and constant comparative analysis.

Findings: Mean age was 53.1 years (range 24-80); 62.5% were male. Time since VAD surgery ranged from 1 to 42 months. Immediate post-surgery concerns included ability to perform self-management skills, fear of the unknown, and ability to adjust to lifestyle changes (e.g., showering, toileting). Over time, concerns became more nuanced and were associated with patients' day-to-day experiences: fear of complications (e.g., infection, VAD component malfunction), perception of caregiver burden, acknowledgement of depressive symptoms, and physical and mental adjustment to life with a VAD. Although patients reported concerns regarding self-management skills at discharge, many expressed confidence because of training received: "My confidence pulled me through." Confidence increased over time as self-management skills became integrated into the daily routine, and patients adjusted to the dichotomy of a life-saving, yet life-limiting device: "It will just take time to grow on you... I wanna go to the beach. I wanna do this. I wanna do that. But I wouldn't be able to do any of it without the VAD. So we're one."

Discussion: Despite experiencing fear and anxiety about the VAD, most patients conveyed confidence in their ability to perform self-management skills immediately post-surgery. Confidence increased over time as self-management skills became routine, and concerns narrowed, becoming reflective of patient-specific experiences. Provider awareness of the evolution of individualized concerns, which may or may not be explicitly communicated, may inform practice to improve delivery of VAD patient-centered care.

## O.25.2
## Barriers and Facilitators to Talking about Type 1 Diabetes Self-Management: Adolescent Perspectives

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Background: Type 1 diabetes (T1D) is a chronic condition requiring careful management. Individuals living with T1D follow an onerous regime that includes monitoring blood glucose levels, administering insulin and adjusting doses

as required. Parents adopt a key role as caregivers and educators for adolescents living with T1D and motivate adolescents to assume responsibility for the self-management of T1D. Research indicates that metabolic control of T1D frequently declines during adolescence. Adolescents and their parents may experience uncertainty in relation to the nature of their roles in T1D self-management. This research aims to explore adolescent perceptions of communicating with parents about self-management of T1D.

Method: Qualitative semi-structured interviews were conducted with twenty-eight adolescents (aged 11-17 years living with T1D) to explore their experiences of communicating with their parents about self-management of T1D. Adolescents were recruited through two national diabetes and endocrine units and via web advertisement through a national diabetes advocacy organisation. Interview data were transcribed verbatim and analysed thematically.

Findings: Themes pertaining to barriers and facilitators to communication with parents about T1D self-management from the perspective of adolescents emerged from the data. Adolescents described how openness in interactions with parents allows greater engagement with independent or shared selfmanagement, decision making relating to management and general learning about T1D. Challenges to communication about self-management also emerged from the data. Challenges and barriers to communication include when conflict is present between the adolescent and their parent, when adolescents have not been managing their T1D as required or when blood sugar readings are not within target ranges.

Discussion: The importance of regular communication between adolescents and their parents is highlighted in the current study. Promoting openness in communication for both adolescents living with T1D and their parents may reduce the problems that can occur during the transition from parentdominant management to adolescent-dominant management of T1D. The findings of this research may also contribute to the knowledge of health care professionals on the content of communication that occurs between adolescents and their parents in relation to T1D and how to assist adolescents as they transition towards independent self-management of T1D.

## O.25.3
## Can you hear the noise?  Attuning to diabetes and diabetes technology in the context of an online community of inquirers.

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Background:  Diabetes technology, such as insulin pumps and continuous glucose monitors, aims to ameliorate the challenges of diabetes management. Yet these devices, like diabetes management, are complex. Social media offers a source of support outside the clinical encounter, but brings other dissonances.

Method:  This study merges online and offline ethnography. Data were obtained from a year of online observation of Facebook communities, twelve in-depth interviews, human-technological observations of Facebook use, 6 participant-observations at offline peer meetings, and two focus group discussions.

Findings:  Notions of noise emerged as a metaphor for life with diabetes in different contexts. Informants talked about how listening to their bodies required vigilance, to determine if bodily noise derived from diabetes or life in general e.g. symptoms of anxiety and fatigue.

At a peer-group meeting, individuals were continually interrupted by technological alarms warning of threats from blood sugar levels, warnings that were experienced as a mixed blessing. Valuing the life-supporting functions of their diabetes technology, the continual interruptions were also experienced as lacking the subtlety of their own bodily attunements. Informants used different strategies to manage technological noise; some immersed themselves in technological solutions, others used devices more superficially, trusting their embodied attunements to sound the alarm.

The informants sought advice and support from social media to assist their attunements. Social media provided sound and reliable advice, with fears of inaccurate information confounded by the community of inquirers who comprised online groups. Yet the effort to follow and navigate such information also provided a source of noise, with continual updates and repetition also interrupting daily life.

Discussion:  Noise emerged as a metaphor among people with type 1 diabetes in this study. This highlights the complexities of diabetes management and the challenge of knowing what, and what not, to listen to. Social media provided support, but was also a source of dissonance. Social media interactions offer insight into the concerns of people with diabetes, but lack sufficient filters. Healthcare professionals could utilize the exchanges in social media

to inform communication with patients and filter out some of the disturbing noises to which people with diabetes are frequently exposed.

**O.25.4**
**From patient education to self-management. The views of healthcare professionals**

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**Anke Scheel-Sailer, Swiss Paraplegic Centre**
**Hans-Georg Koch, Swiss Paraplegic Association**
**Mirjam Brach, Swiss Paraplegic Research**
**Sara Rubinelli, Swiss Paraplegic Research**

Background:  Patient education is considered to provide individuals suffering from chronic conditions with the knowledge and skills they need to self-manage. By using spinal cord injury (SCI) as a case in point for complex chronic conditions, this study aims at exploring the healthcare professionals' (HPs) views on patient education for the prevention and self-management of pressure ulcers (PUs), a potentially life-threatening complication that generates high costs for the health system.

Methods:  This is an exploratory qualitative study. Data were collected through semi-structured interviews with a purposive sample of HPs working in the field of SCI in Switzerland (N=26) including physicians, nurses and therapists. Interviews were transcribed verbatim and analysed thematically.

Findings:  The analysis of the interviews indicates a major challenge: education takes place during rehabilitation whereas people have to implement the preventive measures at home, where tasks related to self-management are competing with their life commitments. HPs reported that current patient education seemed to succeed in conveying the causes of PU and its severity, but seemed to be less effective in convincing people that PUs can happen to anyone anytime, that individuals with SCI can prevent most of them and that the benefits are higher than the costs. HPs also highlighted that education may sometimes fail in instilling a sense of personal responsibility, without which individuals with SCI sooner or later develop a PU, in that personal responsibility is crucial for self-management. Indeed, interviewees reported feeling sometimes helplessness because "you cannot force an adult to take care of himself, he has to want it".

Conclusion:  To enhance self-management in the long term, patient education should not only promote knowledge but also build motivation and self-efficacy. Most importantly, educational efforts should aim at fostering a sense of responsibility. One way of doing it, is by applying the principles of behavior change. To additionally support this endeavor, during rehabilitation the patient could be introduced to a network including homecare providers and counsellors, as experience shows that when personal contacts and trust are established, people are more likely to get in touch.

**O.25.5**
**Prevalence and Determinants of Online Health-Seeking Behaviors among Older Adults: a 3-Year Study**

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**Marina Arvanitis, Northwestern University**
**Rachel O'Conor, Northwestern University**
**Laura Curtis, Northwestern University**
**Michael Wolf, Northwestern University**

Background: Web-based technologies are increasingly available to support engagement in self-management behaviors among adults with chronic illness. Despite reported trends in the adoption of these technologies, it is uncertain whether disparities in uptake exist among older adults. We examined online health-seeking behaviors over a 3-year period and investigated determinants of lack of uptake among an older adult cohort.

Methods: Adults ages 55-74 were recruited from an academic medical center and six federally qualified health centers in Chicago, IL. Structured, in-person interviews were conducted 3 years apart among 440 participants. Health literacy, as measured by the Test of Functional Health Literacy in Adults, and sociodemographic characteristics were captured. Use of the internet to find health information and to communicate with healthcare

providers were self-reported. Changes in these online health-seeking behaviors were defined as "maintained/gained" vs. "never had/stopped" over the 3-year period. Logistic regression models examined determinants of online health-seeking behaviors.

Results: At baseline, 73.2% of participants accessed health information online and 48.5% communicated with their healthcare provider online. At follow-up, 7.2% began seeking health information online and 11.4% initiated online communication with healthcare providers. In multivariable analyses, individuals with a high school education or less (aOR 4.34, 95% CI 2.00, 9.45; p<0.01), income <$25,000 (aOR 2.26, 95% CI 1.04, 4.89; p=0.04), or identifying as African American (aOR 2.50, 95% CI 1.27, 4.91; p<0.01) were more likely not to seek health information online over time. Similarly, those with a high school education or less (aOR 2.40, 95% CI 1.08, 5.32; p=0.03), limited health literacy (aOR 2.26, 95% CI 1.11, 5.44; p=0.03), or identifying as African American (aOR 6.70, 95% CI 3.60, 12.45; p<0.01) were more likely to have never communicated or stopped communication with healthcare providers online.

Conclusions: We found disparities in uptake of online health-seeking behaviors in a cohort of older adults over a 3-year period. Although engagement in these behaviors increased, racial/ethnic minorities and those with limited health literacy, lower educational attainment, and lower income may be less able to benefit from these technologies. These disparities should be taken into account when designing tools and interventions targeted at this population.

## O.26.1
## A Framework for Discerning Purposes of Shared Decision Making in Care

**Ian Hargraves, Mayo Clinic**
**Marleen Kunneman, Mayo Clinic**
**Juan Pablo Brito, Mayo Clinic**
**Victor Montori, Mayo Clinic**

Background:  The purpose(s) of Shared Decision Making (SDM) are largely assumed. There are observed challenges in SDM that under-examined issues of purpose may contribute to:

- Mechanical performance of SDM steps disconnected from purpose

- Mandated SDM without elaboration of why SDM should be pursued or what it should be used for.

- Suspicion and subsequent resistance amongst clinicians and students towards SDM, because SDM is seen as a normative corrective to poor behavior rather than purposeful in care

Methods:  Through a schema developed by the philosopher of pluralism, Richard McKeon we identified four possible umbrella SDM conceptions with their own distinct theory and purpose. We looked for examples of each in differing SDM process descriptions and decision aids designed to support them, and found examples for each.

Findings:  We discerned four umbrella purposes:

- To determine an optimal treatment for a patient

- To enable patient choice and empowered agreement

- To thoughtfully shape caring action to the demands and possibilities of a troubled situation

- To reach loving insight into what the right thing to do is in the midst of turmoil

Each of these purposes have a primary focus: The alternatives, the people choosing, the situation, the dignity of patients and the bonds connecting people; respectively.

Across accounts, common terms such as decision and option were present. When critically examined, again informed by the schema, the use of these common terms, e.g. option, had different meanings associated with a purpose that allowed them to be used in different ways for differing ends. Table 1 summarizes the purposes, foci, and meanings of common terms—"decision" and "option"

| Concept of SDM | Purpose of SDM | Primary focus | *"Decision"* is: | *"Option"* is |
|---|---|---|---|---|
| 1 | To determine the optimal treatment factoring in each patient's values | Alternative treatments | A selection from alternatives | An alternative treatment |
| 2 | To enable making an informed choice, and agency in establishing agreement with clinicians | Person(s) choosing | A choice executed by a person(s) with agreement or assent between parties | Something that a person can opt for (choose) |
| 3 | To shape action to the demands and possibilities of the situation | The problematic situation demanding care | A coherent response to an ongoing situation | A hypothesis for what might be done, evaluated in shared medical inquiry in terms of its ability to contribute to resolving, for now, the situation. |
| 4 | To reach a peaceful, loving, and dignified insight within turmoil | The dignity of patients, their families and the love that does, or might join them | Insight within a community of care that this is the loving and dignified thing to do | One opinion amongst many in confusion and turmoil |

Table 1. Four distinguished purposes of SDM

Discussion: We have identified four Purposes of SDM, each associated with a primary focus and variation in meaning and use of the terms Decision and Option. These distinguished purposes may be useful, for example, in structuring decision aids, measure development, guidelines for SDM, and teaching clinicians and students SDM. We have used this framework successfully in teaching SDM to medical students, and engaging government agencies.

**O.26.2**
**Cancer patients' preferred and perceived roles in decision-making in a representative German sample**

**Pola Hahlweg, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Levente Kriston, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Isabelle Scholl, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Elmar Brähler, Department of Medical Psychology and Medical Sociology, University Medical Center Leipzig**
**Herrmann Faller, Department of Medical Psychology and Psychotherapy, Medical Sociology and Rehabilitation Sciences, and Comprehensive Cancer Center Mainfranken, University of Würzburg**
**Holger Schulz, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
**Joachim Weis, Department of Psychooncology, Tumor Biology Center, University of Freiburg**
**Uwe Koch-Gromus, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**
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**Monika Keller, Division of Psychooncology, Department for Psychosomatic and General Clinical Medicine, University Hospital Heidelberg**
**Anja Mehnert, Department of Medical Psychology and Medical Sociology, University Medical Center Leipzig**
**Martin Härter, Department of Medical Psychology, University Medical Center Hamburg-Eppendorf**

Background: Shared decision-making is especially relevant in cancer care. Previous studies focused on single cancer entities and/or used small samples to gain insight into treatment decision-making processes in oncology. The aim of this study was to analyze the preferred and perceived levels of involvement of patients in treatment decision-making from the patients' perspective in a large-scale and representative sample of German patients with various cancer diagnoses.

Methods: We conducted a multicenter, epidemiological cross-sectional study with a proportional stratified random sample based on the nationwide incidence of all cancer diagnoses in Germany. Patients from acute care hospitals, outpatient cancer care facilities, and cancer rehabilitation clinics in five regions in Germany were included in a consecutive sample of adult cancer patients across all cancer entities and disease stages. The study at hand reports a secondary analysis using the Control Preferences Scale (CPS) assessing the preferred level of involvement in decision-making and the 9-item Shared Decision-Making Questionnaire (SDM-Q-9) assessing the perceived level of involvement as outcomes.

Findings: 4,020 patients (mean age of 58 years, 51% female) completed the self-report questionnaire. About a third each preferred patient-led, shared, or physician-led decision-making, respectively. 50.7% perceived high levels of shared-decision-making, and about a quarter each reported moderate (26.0%) or low (24.3%) levels of shared decision-making. The concordance between preferred and experienced levels of involvement were found to be statistically significant, but with a very small effect size (p<0.001, Cramer's V=0.067). Sex, age, relationship status, education, occupational status, health care setting, and tumor entity were linked to preferred and/or experienced decision-making.

Discussion: The majority of patients with cancer wanted some level of involvement in decision-making. Many patients reported having perceived a high level of shared-decision making. However, there is a considerable proportion of cancer patients that did not perceive their preferred level of involvement. This large-scale epidemiological study provides a solid basis for implementation efforts for improving shared decision-making in German cancer care.

## O.26.3
## Conceptual models of shared decision making: A systematic review of the literature

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**Fania R. Gaertner, Department of Biomedical Data Sciences, Leiden University Medical Center**
**Anne M. Stiggelbout, Department of Biomedical Data Sciences, Leiden University Medical Center**
**Arwen H. Pieterse, Department of Biomedical Data Sciences, Leiden University Medical Center**

Background: To 1) provide an up-to-date overview of conceptual models of shared decision making (SDM), including their empirical foundation and type of decision, 2) give insight in the prominence of elements and actors within the models, and 3) integrate elements into components.

Methods: Three electronic databases (PubMed, Embase, Cochrane) were systematically searched for peer-reviewed articles published from inception up until June 21, 2016. Pairs of raters independently screened titles and abstracts, and then full-texts of all articles retrieved. One rater extracted and analysed the data, another checked it.

Findings: The search yielded 1765 records, from which 22 conceptual models described in 22 different articles from 18 different first authors were included for this review. Ten models were developed based on empirical data gathered with the purpose to inform the model, and twelve were based on analytical thinking. Fourteen models were developed for a specific setting, such as psychiatry or oncology. Nine models focused on treatment decision making; for half of the models, the authors did not state the type of decision of interest. The models identified criteria, stages, elements, steps, or skills, often in a certain sequence, but most without further clarification of relationships. We identified 52 different elements in the 22 models. Six elements previously identified by Makoul and Clayman (2006) were part of at least 11 (50%) models: List options, Benefits/risks, Patients' preferences, Check/clarify patient understanding, Make or explicitly defer decision, and Learn about the patient. For each of the 52 elements, models differed in whether an actor was stated or not. Overall, clinicians had a role regarding 46 elements in one or more models, compared to 30 elements for patients. We integrated the elements into 25 components, some describing explicit phases in SDM processes, others relating to more general behaviours. The frequency of components and the frequency of the patient role in them differs markedly.

Discussion: This systematic review provides an up-to-date overview of key elements within conceptual models of SDM. It shows that models show some similarities, but large heterogeneity exists. We urge researchers to elucidate relationships between elements in future models.

## O.26.4
## Organizational- and system-level characteristics that influence implementation of shared decision-making and strategies to address them – a scoping review

**Isabelle Scholl, University Medical Center Hamburg-Eppendorf**
**Allison LaRussa, The Dartmouth Institute for Health Policy & Clinical Practice**

**Pola Hahlweg, University Medical Center Hamburg-Eppendorf**
**Sarah Kobrin, National Cancer Institute**
**Glyn Elwyn, The Dartmouth Institute for Health Policy & Clinical Practice**

Background: Shared decision-making (SDM) is poorly implemented in routine care, despite being promoted by health policies. No reviews have solely focused on an in-depth synthesis of the literature around organizational- and system-level characteristics (i.e. characteristics of healthcare organizations and of healthcare systems) that affect SDM implementation. A synthesis would allow exploration of interventions to address these characteristics. The study aim was to compile a comprehensive overview of organizational- and system-level characteristics that are likely to influence the implementation of SDM, and to describe strategies to address those characteristics described in the literature.

Methods: We conducted a scoping review using the Arksey & O'Malley framework. The search strategy included an electronic search and a secondary search including gray literature. We included publications that reported on a project that promoted implementation of SDM or other decision support interventions in routine healthcare. We screened titles and abstracts, and assessed full texts for eligibility. We assessed organizational- and system-level characteristics using qualitative thematic analysis.

Findings: After screening 7,745 records and assessing 354 full texts for eligibility, 48 publications on 32 distinct implementation projects were included. Most projects (N=22) were conducted in the US. Several organizational-level characteristics influenced the implementation of SDM, including organizational leadership, culture, resources, and priorities, as well as teams, and workflows. System-level characteristics included policies, clinical guidelines, incentives, culture, education and licensing. We identified potential strategies to address current barriers, e.g. examples of how to facilitate distribution of decision aids in a health care institution.

Discussion: Although infrequently studied, organizational- and system-level characteristics appear to play a role in the failure to implement SDM in routine care. A wide range of characteristics described as supporting and inhibiting implementation were identified. Future studies should quantify these characteristics' differential impact on SDM implementation, their likely interactions, and how different characteristics might operate across types of healthcare systems and different areas of healthcare. Healthcare organizations that wish to support the adoption of SDM should carefully consider the role of organizational- and system-level characteristics. Implementation and organizational theory could provide useful guidance for how to address facilitators and barriers to change.


**O.26.5**
**Patient readiness for shared decision-making: a scoping review of the literature**

**Arwen Pieterse, Leiden University Medical Center**
**Sascha Keij, Leiden University Medical Center**
**Saida Moaddine, Leiden University Medical Center**
**Fania Gärtner, Leiden University Medical Center**
**Anne Stiggelbout, Leiden University Medical Center**

Background: Patients may not be well-equipped, or ready, to become involved in shared decision making (SDM). The aim is to identify patient-related characteristics reflecting patient readiness for SDM by means of a scoping review, a rigorous method for synthesizing evidence that is heterogeneous in nature. The review addresses the question: What patient-related elements have been reported to be associated with effective patient engagement in SDM about treatment?

Methods: A three-step approach was taken to searching articles: 1) A limited initial search in PubMed, Embase, Web Of Science, Cochrane, PsychInfo from inception to June 20, 2017; 2) A full search in the same databases, based on search terms identified in step 1 and results of interviews with patients, providers, and scientists on patient readiness; 3) a hand-search of references of included articles. Articles are included if: published in a peer-reviewed journal, reporting on patient-related elements and on treatment decision-making. In quantitative articles, SDM should be measured using an SDM instrument (Gärtner et al, PLoS One, 2018). The main focus of qualitative articles should be on what makes patients ready for SDM. Data will be extracted on study population, univariate and multivariate results on associations (quantitative studies) and opinions on readiness (qualitative studies).

Findings: The initial search delivered 2636 hits. After title/abstract screening, 463 hits remained for full-text screening, which is now underway. Screening of the first 20% of full-text hits resulted in 8% that were deemed fit for data extraction. The results from the interviews (N=14) that will inform the second search suggest that, e.g., a sense of autonomy and being able to verbalize thoughts and emotions support patients to engage in SDM, while e.g., not

feeling equal, higher age, and cultural barriers can hamper participation. Final results from data-extraction are expected by July 2018.

Discussion: The scoping review will help us identify patient-related elements that may affect patients' readiness to engage in SDM processes, and to collect evidence on actual associations between these elements and SDM. Next, a questionnaire will be developed to assess key elements of patient readiness in research.

## O.27.1
## Changing Organizational Culture: Training Leaders in Humanistic Interprofessional Education

**Elizabeth Rider, Department of Pediatrics, Harvard Medical School**
**Deborah Navedo, Health Professions Education Program, Center for Interprofessional Studies and Innovation, MGH Institute of Health Professions**
**William Branch, Division of General Internal Medicine and Geriatrics, Department of Medicine, Emory University School of Medicine**

Background/Context: Organizational cultures influence professional identity formation, faculty wellbeing, and care of patients/families. The ability of interprofessional healthcare teams to communicate collaboratively is essential for safe, high quality, relationship---centered care. We describe a 7--- site national project, Faculty Development for the Interprofessional Teaching of Humanism,* designed to train interprofessional education (IPE) faculty leaders. Boston Children's Hospital/Harvard Medical School (BCH/HMS) is the first pediatric site selected to design and implement interprofessional curricula. Objectives: to develop a national IPE curriculum for interprofessional faculty; to adapt the curriculum for pediatrics; and to create and sustain a faculty fellowship for IPE leaders at BCH/HMS.

Methods: To achieve interprofessional faculty buy---in and sustainability at BCH/HMS, we created the Faculty Fellowship for Leaders in Humanistic Interprofessional Education. Fellows participate in 1½---hour, twice---monthly small---group sessions for 8 months and undertake a group IPE project. Topics focus on interprofessional collaboration/communication and include: highly functioning teams, advanced team formation, diversity, appreciative inquiry, narrative reflection, patients' perspectives, well---being, IPE, exploration of values based on the International Charter for Human Values in Healthcare, and others. To increase impact, we recruited fellowship co---sponsors from departments/institutes throughout BCH and from the MGH Institute for Health Professions.

Findings: We developed and implemented an IPE curriculum in humanism and professionalism at 7 national sites. At BCH/HMS we also created a faculty leadership fellowship. 21 faculty applied. The first cohort included 11 IP faculty representing medicine, nursing, social work, and psychology. Fellows are developing a group IPE humanism project to promote humanistic values and culture.

Discussion: Part of a multi---institutional national project to develop an IPE curriculum for the teaching of humanism/professionalism, at BCH/HMS we also developed a unique Faculty Fellowship for Leaders in Humanistic Interprofessional Education, adapted curricula for pediatrics, and created new curricula on values. The Fellowship provides opportunities for IPE faculty leaders to enhance teaching, communication/collaboration skills, reflective capacities, and interprofessional role modeling in humanism/professionalism, and to work together to promote humanistic values within organizational culture.

## O.27.2
## Clinical teachers' perspectives on workplace based communication skills teaching for medical students

**Katherine White, University of Iowa College of Medicine**
**Marcy Rosenbaum, University of Iowa College of Medicine**
**Nicoll Manhica, University of Iowa College of Medicine**
**Patrick Barlow, University of Iowa College of Medicine**

Introduction: While much time in medical student education is devoted to teaching about communication skills (CS), the majority of this is limited to formal sessions during pre-clinical and clinical training. Research has demonstrated informal clinical training and the hidden curriculum can contradict what is taught in these formal sessions and contribute to a decline in students' CS. While student perspectives on what and how they learn about CS during clinical training have been increasingly explored, less research is available examining clinical teacher's perspectives on teaching CS in the context of patient care. The current research gives a voice to the teacher.

Methods: All physicians who supervise students as part of a required outpatient internal medicine clerkship were invited to participate in interviews regarding teaching of CS in the clinical setting. Interviews occurred after teachers were observed in clinic in order to be able to refer not only to ideas but also to teachers' observed behavior. Interviews lasted between 15-20 minutes and were audiorecorded, transcribed and entered into an Nvivo database for systematic coding. Thematic analysis was used to identify common themes in teachers' narratives.

Results: 29 (19 male, 10 female) physicians participated in interviews regarding CS teaching and represented a wide range of perspectives on the topic. The major themes that emerged include the extent to which CS is or is not recognized as an important topic to teach; teachers' own knowledge and skills related to effective CS; and strategies, opportunities and barriers to teaching CS in the clinical workplace including time pressures, balancing and prioritizing teaching of CS in relation to other clinical topics, and need for increased training on effective CS teaching methods in the workplace.

Discussion: Teaching of CS is often not recognized or prioritized by clinical teachers and even when it is teachers are often are not aware of effective and efficient methods for addressing CS in the busy clinical setting. Faculty development focused on enhancing teacher CS knowledge and empowering teachers with practical approaches has the potential to increase CS emphasis during workplace based supervision.

## O.27.3
## Communicating with touch: a cooperative inquiry of body pedagogics in medical education

**Martina Kelly, University Of Calgary**
**Lara Nixon, University Of Calgary**

Background/purpose: Touch is an important form of nonverbal communication, rarely addressed in medical education. In a systematic review on touch across the healthcare professions, learners and faculty identified the need for explicit instruction on touch. Study authors identified only four papers detailing physician's experiences of touch. To inform curriculum design on this topic, we wished to identify and describe preceptor experiences communicating with touch, and how they addressed this subject with learners.

Methods: Six academic physicians met 12 times over 3 years, using the action research framework of co-operative inquiry. Subjects acted as co-researchers to engage in cycles of action and critical reflection. Meetings were recorded and transcribed verbatim. In between meetings, participants wrote personal experiential accounts, interviewed curriculum leaders, examined relevant documentation (e.g. school policies and accreditation statements), and video-recorded role-plays stimulated by personal narratives. Documentation examined and produced, was recorded via audit trail. Data were examined cross-sectionally, (by meeting), and longitudinally (across meetings) using template analysis to identify horizontal and vertical themes. Two external experts in qualitative analysis acted as critical colleagues to strengthen our interpretation.

Findings: Participants comprised four family physicians, a surgeon and an intensivist; three men and three women, from different ethnic backgrounds. Three key themes were identified: defining touch; boundaries of touch, and the influence of organizational culture. Touch was a described as a tacit practice which included affective dimensions and embodied interaction. Touch extended beyond the dyadic experience, and was influenced by wider disciplinary and societal elements. Specific teaching was challenging due to contextual nuances in the patient /physician relationship at the individual level (e.g. gender, culture, prior experience), and practice setting. Organizational factors such as school policies and accreditation requirements influenced participants' practices in relation to touch. These findings are united under the sociological concept of body pedagogics.

Discussion: Touch is an important communication skill in medicine but complex to teach and highly contextualized. Starting points could include: 1) supporting student reflection on their experiences of touch 2) fostering dialogue amongst faculty to ensure that fears of impropriety does not displace teaching around the power of communicating with touch.

## O.27.4
## Train the Trainer-programme for communication skills training in Austrian healthcare organizations

**Marlene Sator, Austrian Public Health Institute**
**Heike Kraus-Füreder, Institute of Health Promotion and Disease Prevention**
**Peter Nowak, Austrian Public Health Institute**

Background: As part of a comprehensive national strategy for improving healthcare communication in Austria a train the trainer-certificate-programme for communication skills training (cst) in healthcare organizations has been developed on a national basis in Austria.

The goals of this 1-year further qualification programme, which has been developed in close cooperation with tEACH, are:

- further qualification of communication trainers and healthcare professionals for developing and implementing cst in healthcare and workplace based communication skills teaching according to evidence-based standards

- development of networks of trainers and simulated patients for the nationwide implementation of cst in healthcare organizations

- further qualification of a selected group of communication trainers and health professionals who are to conduct train-the-trainer courses in the medium term

Methods: On the basis of problem identification and general needs assessment done as part of the national strategy for improving healthcare communication, a needs assessment of the target group of participants was conducted via a survey questionnaire. Broad curricular goals and specific measurable objectives were identified. Educational strategies include five courses run by tEACH, an accompanying practical manual for facilitators, participants' practice projects, peer feedback and mentoring, regular sessions for building up a trainer network and a workshop for simulated patients. Implementation of a pilot with a cohort of 19 participants has started financed by the Main Association of Austrian Social Security Institutions and in close cooperation with tEACH. Evaluation and feedback is done at the individual level and at the programme level and include learners' response to the training as well as changes in knowledge and skills of learners (pre-post self-assessment).

Findings: The programme attracted more than 40 people, the 19 participants come from all over Austria from different professional backgrounds in healthcare and communication science. First results of course evaluation show participants' overall satisfaction with the first courses held. Further evaluation data will be presented.

Discussion: This programme will be an important step for addressing the gap between the efforts made in teaching communicative competences in the training of health professions and the further education of these competences in the workplace.

## O.27.5
## Unravelling discrepancies in teaching 'Exchange of Experiences'-sessions in GP training

**Marije van Braak, Erasmus Medical Centre**
**Mario Veen, Erasmus Medical Centre**
**Anne Weiland, Erasmus Medical Centre**

Background Clinical communication is a critical skill for residents to develop during GP specialty training in so called 'Exchange from Experiences'-sessions (EoE) held at the start of residents' weekly day release. Although residents generally value the sessions highly, many tutors struggle with how to optimally facilitate the sessions. Institutional information on goals and guidelines for teaching EoE is scarce; informal and tutor-individual goals and guidelines abound. Learning to teach these sessions, therefore, is quite challenging for beginning as well as advanced tutors. In this study, we aim to aid faculty development by investigating the variety of tutors' individual goals and guidelines in relation to those institutionally formulated.

Methods In this qualitative phenomenological study, we collected all EoE-related educational material and conducted video-stimulated recall interviews (VSRIs) with tutors at all eight Dutch GP training institutes. Conducting interviews based on actual session recordings enabled us to obtain in-depth reflections about individual goals and guidelines, while staying close to what happens in actual practice. We used Template Analysis (TA) to analyze the transcribed audio recordings of the interviews and the educational material.

Findings The thematic analysis of tutors' individual goals and guidelines resulted in a description of aims and practices of EoE in the Netherlands. Tutors differed in their theories on EoE; their reported teaching strategies varied accordingly. Furthermore, tutors' individual goals and guidelines did not align with those institutionally formulated in several respects.

Discussion Our phenomenological inquiry of the theories and models underlying EoE highlights the cacophony of voices on optimal facilitation of EoE-sessions, including teaching of clinical communication skills. Making explicit what the various institutions and tutors aim to achieve with EoE, as well as how this should be achieved, helps us to redesign education and tools for tutors to attain optimal teaching of Exchange of Experiences sessions – including communicative skills. Additionally, the study's overview of institutional and tutors' aims and practices serves as a basis for subsequent explorations of actual practices during EoE. Finally, uncovering between-tutor differences stimulates exchange of teaching strategies between tutors. These would benefit development of our future doctors' communicative skills.

# Symposia

**S.8**
**Emotions in doctor-patient interaction: Perspectives from research, education and clinical practice.**

**Demi Krystallidou, University of Leuven**
**Angela Rowlands, Barts and the London School of Medicine and Dentistry**
**Arnstein Finset, University of Oslo**
**Barbara Schouten, University of Amsterdam**
**Carma Bylund, University of Florida**
**Peter Pype, Ghent University**

Emotional communication (EC) is an important aspect of patient care and has attracted significant interest in medical education and scientific research. Little is known about the orderliness of interaction in EC in medical consultations; even less is known about this in interpreter-mediated consultations. This symposium brings together experienced researchers, educators and practitioners who will provide insights into the above topics from the perspectives of research, education and professional practice and engage in an interactive reflective discussion with the audience.

P1 will approach the topic from an educational perspective and will present ways of dealing with patients' emotions as taught in two medical schools in Malta and in the United Kingdom.  Students learn to acquire medical information but also the patient's contextual information, which often might be expressed in indirect ways and through more or less subtle nonverbal or verbal "clues".

P2 will present findings from a study in which sequences of dialogue including emotional cues and concerns from pediatric consultations are analyzed based on conversation analysis. The sequences include a build-up phase (approach, arrival and delivery of the emotional concern), the response of the pediatrician, the elaboration of the concern (work-up) and eventual topic shift. The application of this sequence approach in communication skills training with hospital physicians in Norway will be illustrated and discussed.

P3 will present the results of two Dutch studies in which audiotaped consultations with GPs, informal interpreters, and ethnic minority patients with limited Dutch proficiency were analysed by means of the VR-CoDES (-P) and a self-developed codebook. It was found that i) patients were less emotionally expressive in consultations with informal interpreters than in consultations without them, and ii) informal interpreters express emotional cues to the GP but hardly provide emotional support to the patient.

P4 will report on a study in Belgium in which 20 video-recorded consultations with hospital clinicians, ethnic minority patients and professional interpreters were analysed by means of the Empathic Communication Coding System (ECCS). It was shown that EC in interpreter-mediated consultations is a joint effort between patients, doctors and professional interpreters. Gradations in the intensity of patients' opportunities and doctors' responses were noticed in the interpreters' renditions affecting ultimately the co-construction of EC.

P5 will depart from the results of a literature review on the expression of emotions through physical contact between doctor and patient during consultations and the effects it can have on psychological and health outcomes. P5 will provide illustrations by drawing on his 25 year clinical experience in Belgium followed by reflections on implications for training through workplace learning.

Qualifications of submitters:

P1 is a Senior Lecturer, Head of Student Support and Head of Year for Clinical Foundation Studies Programme at Barts and the London School of Medicine and Dentistry. Msc Education and Research, Registered General Nurse and Senior Fellow HEA.

P2 is a clinical psychologist with extensive research and teaching experience in communication research with an emphasis on emotional communication.

P3 is a social psychologist and has been researching doctor-patient communication in the context of culture for over 15 years.

P4a. is an interaction analyst in interpreter-mediated clinical communication for over 10 years and is currently leading a project on EC.

P4b is a behavioral scientist working in the area of cancer communication. She developed the Empathic Communication Coding System, an interaction analysis system used to characterize the nature of empathic communication between providers and patients.

P5 is a general practitioner for 25 years and a communication skills trainer for medical students for 8 years.

## S.9
## The Influence of Patient and Physician Attitudes on Clinical Communication in Primary Care and Oncology Settings

**Lauren Hamel, Wayne State University/Karmanos Cancer Institute**
**Susan Eggly, Wayne State University/Karmanos Cancer Institute**
**Lauren Hamel, Wayne State University/Karmanos Cancer Institute**
**Louis Penner, Wayne State University/Karmanos Cancer Institute**
**Sean Phelan, Mayo Clinic, Division of Health Care Policy and Research**
**Mary Catherine Beach, Johns Hopkins University School of Medicine**

Rationale: Patient and physician attitudes influence clinical communication, which, in turn, has important implications for treatment decisions and health outcomes. Panel members will present their research on: the influence of patient characteristics on attitudes toward clinical trial communication, associations between patient and physician attitudes and non-consciously coordinated behavior, the influence of physician and patient race-related attitudes on communication, and the effects of physician characteristics on care for people with obesity. Panel members will discuss translating findings into education and practice.

1.   Influence of Black and White Patient Attitudes and Demographics on Willingness to Discuss a Clinical Trial

Minorities are disproportionately underrepresented in US cancer clinical trials (CTs) for many reasons. We examine demographic and attitudinal predictors of willingness to discuss CTs with their physician among men with advanced prostate cancer. White men (n=87) were more willing to discuss a CT than Black men (n=72), but medical mistrust mediated this difference. Thus, one way to increase minority enrollment is to address medical mistrust during clinical interactions that include a discussion of CTs.

Presenter 1 is a health communication scientist with expertise in patient-physician communication in several medical contexts. She has conducted interventions to identify and overcome patient and physician racial attitudes that may affect the quality of communication.

2.   Racial Attitudes and Nonverbal Synchrony in Oncology Interactions

We posit that patient and physician racial attitudes affect clinical communication through subtle and unintentional behavioral coordination, or nonverbal synchrony. Using motion detection software to measure nonverbal synchrony, we analyzed 68 video recordings of Black patients discussing cancer treatment with their non-Black oncologists. Patients' trust in physicians, group-based suspicion of medical care, and previous discrimination all influenced the extent to which patients and physicians nonverbally synchronized. Future directions and applications will be discussed.

Presenter 2 is a health communication scientist with expertise racial attitudes and their influence on nonverbal aspects of patient-physician communication in oncology, with a focus on sequential analyses.

3.   Stigmatized Patients with Cancer: The Impact of Provider and Patient Attitudes

Patients often enter clinical interactions bearing certain stigma, which affect both healthcare providers and their stigmatized patients. However, precise effects of interactions between provider and patients' stigma-related attitudes on clinical communication remain largely unknown. This presentation focuses on racially discordant oncology interactions and examines the joint effects of provider and patients' attitudes about race on perceptions and verbal activity during oncology interactions. The intersection between race bias and weight bias will also be considered.

Presenter 3 is a social psychologist with expertise in clinical interactions and the impact of stigma and discrimination. He has written extensively on patient and physician race-related attitudes and healthcare disparities.

4.   Medical School and Student Factors Associated with Patient-Centered Care for Obesity

ContACT is a study of medical school/student factors associated with observed patient-centered care for obesity. Third and fourth year medical students (n=111) completed a survey of attitudes and experiences, and were later video recorded providing care for a standardized patient with obesity. We will present associations between medical school factors (e.g., role-modeling, social norms, types of instruction) and individual attitudes (e.g., empathy, tolerance for ambiguity, authoritarianism, care outcome expectations) on measures of patient-centered communication.

Presenter 4 is a social epidemiologist whose research focuses on provider and contextual factors that influence the quality of patient-centered health care for members of stigmatized groups.

5. Panel discussion

We will be joined by an expert discussant who will connect the individual research programs of the panel members, situate their work into the broader literature, and facilitate a discussion on how their findings can inform and improve medical education and clinical practice.

# Workshops

## W.12
## How to make and use online evidence based patient information?

**Roy Beijaert, Dutch College Of General Practitioners**
**Geurt Essers, Network of GP Specialty Training Institutes in the Netherlands**

Rationale: Many patients search online for health information, but finding clear and credible information is challenging. In 2012 the Dutch College of GPs (NHG) launched a non-commercial, evidence based, public website called "Thuisarts.nl" (GP@Home) to provide reliable information on health in order to guide patients in their search. GP@Home offers information in understandable language, using different media to present it. GP@Home can help patients to prepare for a consultation, it helps the health care provider and patient during the consultation and can be used as reference afterwards. To formulate concise, evidence-based, patient-centered health information requires skills, knowledge and a good format.

Learning objectives: Participants learn:

- how to formulate patient-centered, evidence based information on a topic,

- how to integrate digital technology into health care consultations,

- more possibilities for patient empowerment strategies for their own practice.

Teaching methods: After a short introduction on public patient information and the workshop goals (5'), participants will be asked to reflect in small groups on their information needs as a patient in cases of: a) urgent need for help; b) help on life style changes; and c) deciding whether or not to visit a doctor (10'). Results of the groups will be discussed and . conclusions drawn on what criteria public information would have to meet (15') . Then, in subgroups, participants will formulate patient information on symptoms, cause, and management of a health problem in 3x20 words for a 12-year old (15'). Results of the subgroups will presented and discussed (20'). Subsequently, brief information on GP@Home will be provided, explaining the format and showing an example of a decision aid on video (10'). Next, participants will be asked to reflect on what information a patient would need to consult a HCP and feel more in control of the consultation (5'). Finally, in a plenary round take home messages will be assembled and later disseminated to participants (10').

Evaluation of outcomes: Participants write down 2 take home points that they want to remember from the workshop and take the worksheets and reflections with them. Take home messages are shared with the group.

## W.13
## Linking Professionalism and Communication Skills in OSCE Stations

**Elizabeth Kachur, Medical Education Development, Global Consulting**
**Dennis Novack, Drexel University College of Medicine**
**Lucy Bruell, New York University School of Medicine**
**Thanakorn Jirasevijinda, Weill Cornell Medicine**
**Anthony Errichetti**

Rationale: Professionalism is a complex competency to teach and to assess. The same goes for interpersonal and communication skills. Yet, patients, the society and the professions expect both from trainees as well as practitioners, regardless of their field. OSCEs and other programs that utilize Standardized Patients (SPs) or Standardized Healthcare Providers (SHPs) offer unique opportunities for formative or summative assessments of both competencies. This workshop will focus on critical elements to include or eliminate in learner and SP/SHP instructions as well as rating forms in order to achieve the desired balance between professionalism and communication skills.

Learning Objectives: By the end of the session participants should be able to:

- Discuss the intricacies of developing and implementing effective Professionalism/Communication Skills OSCE stations

- Identify scenarios where both competencies are addressed equally

- List key station elements and SP/SHP behaviors that can swing the emphasis towards one of the two competencies

Teaching Methods: After brief introductions and an orientation to the topic (15 min), participants will learn about several Professionalism OSCE stations that also address communication skills. They have been utilized with multiple types of learners, at various institutions. After each brief presentation participants will be asked to identify (via Audience Response System) the focus of the station, either leaning more towards professionalism or towards communication skills (30 min). Subsequently participants will work in small groups on specific station characteristics and SP/SHP behaviors that could unbalance a station. A worksheet will be used to facilitate this process (20 min). Each small group will then report its findings to the large group (15 min). To summarize the session and help with transfer to participants' daily work, they will be asked to share their Take-Home Points with the large group (10 min).

Evaluation of Outcomes for Participants: A brief pre/post-survey and the Take-Home Points at the end of the session will illuminate participants' learning gains from the session.


## W.14
## Teaching medical students how to communicate with patients with mental disorders

**Katelijne Baetens, University of Antwerp**
**Katrien Bombeke, University of Antwerp**
**Winnie Ang,**
**Karin Heyde, University of Antwerp**

Rationale: Patients with major mental health problems suffer more often from somatic diseases, for example diabetes and cardiovascular disease (Sokal et al. 2004). Since all physicians communicate with these patients, a training program for all medical students is useful to communicate with patients with mental disorders, entering the clinical practice. For more than 10 years we have a specific unique program to learn our students how to communicate with patients with depressive symptoms , psychotic symptoms and aggressive behavior. The sessions have place in small, stable groups, with one trainer (general practitioner or psychiatrist or psychologist) and one simulated patient with professional experience in psychiatry (like a psychiatric nurse, therapist) . Students have a personal learning agenda and practice by role play . They get feedback from peers, teacher and simulation patient. Self-reflection is stimulated during the sessions. This training has been awarded as interesting by the students. We would like to share our experiences and promote this kind of training program.

Learning objectives: Participants will learn how to set up an intensive training program with a focus on communication with psychiatric patients. They will be aware of the challenges to do so.

Teaching methods

00-05 Introduction

05-35 Skills

Using role play, we invite participants to recognize psychiatric symptoms, and to build up a working relation with a simulation patient. Participants practice specific communication skills and help each other by providing feedback and advice.

35-65 Teaching

We watch a short video of a session. We discuss different themes , for example : challenges for the teacher, how to deal with emotions of the students, how to create safety for the students,…

65-70 Self-reflection

Participants are invited to reflect on this way of teaching. What do they recognize, appreciate ? What could improve the program ?

70-90 Closing discussion

Participants can ask questions and exchange ideas.

Evaluation of outcomes for participants: We discuss the value and the effectiveness of this educational program. What works well and what could be done better ? How can we make this method safe for all participants? What experiences do other participants have with teaching these specific skills?

**Using the Standards for UNiversal reporting of patient Decision Aid Evaluations (SUNDAE) guidelines - A workshop**

**Purva Abhyankar, Faculty of Health Sciences and Sport, University Of Stirling**
**Richard Thomson, Institute of Health and Society, Newcastle University**
**Karen Sepucha, Harvard Medical School**
**Aubri Hoffman, Department of Health Services Research, University of Texas MD Anderson Cancer Center**
**Annie LeBlanc, Department of Family Medicine and Emergency Medicine, Laval University**
**Hilary Bekker, Leeds Institute of Health Sciences, University of Leeds,**
**Stacey Sheridan, Division of General Medicine and Epidemiology, University of North Carolina at Chapel Hill,**
**Carrie Levin, Healthwise Inc**
**Mary Ropka, Public Health Sciences, University of Virginia School of Medicine**
**Victoria Shaffer, Health Sciences and Psychological Sciences, University of Missouri,**
**Dawn Stacey, Ottawa Hospital Research Institute, University of Ottawa**
**Peep Stalmeier, Department for Health Evidence, Radboud University Nijmegen Medical Center,**
**Ha Vo, Health Decision Sciences Center, Massachusetts General Hospital,**
**Celia Wills, College of Nursing, Ohio State University**

Rationale:  For many healthcare decisions, patients and professionals must make choices together based on the best available evidence and the patient's values and preferences. Patient decision aids (PDAs) are evidence-based tools to support this process as adjuncts to good clinical communication and shared decision making. PDA adoption in practice relies on evidence of effectiveness but significant gaps in reporting of PDA evaluations impede the use, replicability, synthesis and implementation of this evidence. It is important to ensure that PDA evaluations are conducted robustly and reported accurately, completely and without bias. Recently published SUNDAE guidelines (Standards for Universal reporting of patient Decision Aid Evaluations) aim to improve the quality and transparency of reporting of PDA evaluations.

Learning objectives:  Following this workshop, participants will be able to

- Describe the SUNDAE guidelines, checklist and explanation and elaboration (E&E) document and their appropriate use when designing and reporting studies;

- Critically review published studies to identify reporting of checklist items;

- Discuss the value and feasibility of using the checklist and E&E; and

- Map the pathway from improved reporting of evidence to uptake of the evidence into practice

Teaching methods:  The faculty will briefly present the rationale, development process and intended use of the checklist and E&E document (20 mins). Workshop participants will then break into small groups to assess the extent to which selected published papers incorporate SUNDAE checklist items (30 mins). The groups will critically assess the quality of reporting of the items, and the role and feasibility of the Checklist and E&E to support better reporting. Finally, the groups will discuss the value of improved reporting in improving the quality and uptake of evidence by considering impact on study design, preparation of manuscripts, peer-review, evidence synthesis, and implementation (30 mins).

Evaluation of outcomes:  Participants will be encouraged to reflect on their learning through a 'one minute paper' where they write down the two most significant things they have learned. Participants will then be asked to note down plans for using this learning in designing, conducting, reporting, synthesizing, and critically reviewing PDA evaluations (10 mins).

# Works in Progress Oral Presentations

## WIP.2.1
**Co-design of a training package for radiographers to manage emotional talk with patients**

**Mara Van Beusekom, School of Medicine, University Of St Andrews**
**Josie Cameron, Edinburgh Cancer Centre, Western General Hospital**
**Carolyn Bedi, Edinburgh Cancer Centre, Western General Hospital**
**Elspeth Banks, National Cancer Research Institute**
**Gerald Humphris, School of Medicine, University Of St Andrews**

Background:  Fears of cancer recurrence (FCR) are high in breast cancer patients, and difficult to change once developed. Although complex psychological interventions are becoming available, they require intense resource to implement – a better strategy is prevention. With the primary objective to reduce the development of FCR during radiotherapy treatment, the aim of the FORECAST-2 study is to co-design and pilot a brief training package (including a video and manual) to assist therapeutic radiographers to manage concerns expressed by patients during treatment review appointments.

Methods:  At the time of the presentation, the design phase of the project will be in progress. A co-design process with radiographers and past patients will help to guide the development of the training package, which will be modelled on an effective brief communication skills intervention by Little et al. (2015). Co-design and focus group sessions with patients and radiographers will be transcribed and analysed using a thematic framework approach. The outcomes of this phase will inform the instructions for the development of the training video and manual.

Preliminary findings:  The pilot FORECAST study confirmed that FCR can indeed develop during radiotherapy. Some evidence was found that these fears were sensitive to the communication exchange with therapeutic radiographers during weekly review appointments.

Preliminary implications of research:  This will be the first dedicated intervention that is specifically targeted to assist breast cancer patients with their foremost concerns during radiotherapy treatment to prevent exaggerated FCR from developing. This project will produce further understanding of the crucial personal communication between therapeutic radiographers and their patients undergoing vital treatment. In addition to this, it will enable development of a unique evidence-based intervention to enable staff to identify emotional talk in their patients, allow elaboration of patients concerns and increase the likelihood of reducing FCR development.

Request for feedback:  Feedback would be appreciated on the integration of recommendations from literature, preliminary studies and the various stakeholders into the training video and manual, to ensure the project can move forward with an optimally helpful training package to support therapeutic radiographers in managing emotional talk with breast cancer patients.

Supported by Breast Cancer Now.

## WIP.2.2
**Breaking Bad News: Feasibility and Benefit of a Brief Training Program for Pediatric Fellows**

**Katharine Robb, University of Iowa Stead Family Children's Hospital**
**Marcy Rosenbaum, University of Iowa Roy J. and Lucille A. Carver College of Medicine**

Background:  The way bad news is delivered impacts patient satisfaction and outcomes, and its anticipation is a source of stress for providers. Most physicians, however, receive no formal training in the skill and lack competence at giving bad news. Discussions involving pediatric patients present additional challenges, and parents and providers agree that dedicated instruction would be beneficial. Despite this, the rigorous nature of fellowship training has precluded incorporation of formal education into subspecialty curricula. This study aims to evaluate the feasibility of a simulation-based bad news training program for pediatric fellows and its impact on comfort level and competence.

Methods:  University of Iowa pediatric hematology/oncology, neonatology, and critical care fellows participated in the pilot study. Each fellow completed 2 specialty-specific simulations, after which a 2-hour small group session incorporated debriefing, a framework for delivering bad news, and a re-rehearsal exercise. Additional simulations were completed 5-6 months after training to assess skill retention. Performance was evaluated by the simulation

actors, a physician observer, and a blinded observer using the global Breaking Bad News Assessment Scale (glBAS). Scores were compared using matched pairs T-tests.

Preliminary Findings: Twelve fellows completed the program. Blinded observer assessment is ongoing. Preliminary data show improvement after training, with average combined (actor + physician) rater scores increasing from 3.50/5 to 3.94/5 (p = 0.006). Self-assessments were also higher after training, with average overall scores increasing from 3.08/5 to 3.56/5 (p < 0.001). Fellow self-ratings were lower than objective rater scores both before and after training (p = 0.03).

Preliminary Implications: Pediatric fellows feel unprepared to give bad news and consider their performance during such conversations poor. A brief, single-session educational program can be incorporated into fellowship training and is a viable option for improving fellows' comfort and competence when breaking bad news.

Request for Feedback: Feedback regarding choice of statistical analysis and suggestions for additional analyses would be appreciated. Suggestions for future directions and ways to expand the program would also be helpful.

## WIP.2.4
## Medical students´ perceptions towards learning communication skills: implications for medical education in Angola

**Ana Gerardo, Faculty of Medicine of Mandume Ya Ndemufayo University**
**Elizabete Loureiro, Faculty of Medicine of University of Porto**
**Maria Ferreira, Faculty of Medicine, University of Porto**
**Mario Fresta, Faculty of Medicine of Agostinho Neto University**

Background: Communication skills are essential to clinical competence and positively influence patients' compliance, understanding, and the reduction of clinical errors.

Many studies have widely acknowledged and motivated gradual integration of Clinical Communication Skills (CCS) training across medical education, however, there is a lack of outcome-based research about CCS teaching and assessment processes in Angolan medical education. This study is integrated in a larger study on clinical competencies in Angolan medical education.

Primary objective: (i) to assess Angolan medical students' perceptions towards learning CCS; (ii) to analyze their attitudes and anxiety levels towards the acquisitions of CCS.

Methods: Transversal, descriptive study using quantitative and qualitative variables Design: 6th year medical students from 6 public medical schools in Angola, responded to a demographic questionnaire, an open-ended survey, the State-Trait Anxiety Inventory (STAY-1 & STAY-2) and the Communication Skills Attitudes Scale (CSAS). Preliminary findings: We have a response rate of 70% of the students from 6 (of 9) medical schools in Angola, 56% of which are female students with mean age of 26. All other results are being analyzed through statistical methods and content analysis is being undertaken to describe and systematically analyze the content written by students to the open-ended survey.

Preliminary implications: We suspect that the findings will suggest an improvement of curricula, teaching and assessment methods, and investment in faculty development, which are likely to foster positive perceptions towards learning communication skills in these students. These findings shall contribute to the improvement of the medical education in Angola as well as the enhancement of the quality of healthcare and greater humanization of medical practice.

## WIP.2.5
## Peer Coaching to Promote Patient Centered Communication in Cancer Care

**Tejaswini Dhawale, University of Washington**
**Kathleen Mazor, University of Massachusetts Medical School**
**Thomas Gallagher, University of Washington**

Background: Effective communication is essential to the delivery of patient-centered cancer care. Unfortunately, efforts to improve patient-oncologist communication have faltered because physician communication behaviors have proven difficult to change. Peer coaching of oncologists on communication skills is a promising approach that overcomes the shortcomings of traditional communication skills training. We developed a peer coaching model that provides personalized, goal-directed, real-time feedback on communication to oncologists. Our primary

objective is to determine the impact of structured peer coaching on physician behavior. Our secondary objective is to determine the impact of peer coaching on patient experience and overall satisfaction. We have the following aims:

- Aim 1. To determine the acceptability of a peer coaching program.

- Aim 2. To assess the impact of peer coaching on the following oncologist communication behaviors:
  - o (1) core communication skills
  - o (2) communication of goals of care and prognosis
  - o (3) communication about treatment options and
  - o (4) end of life care.

- **Aim 3. To assess the impact of peer coaching on patients' experiences of communication and care.**

- Aim 4. To determine the impact of a peer coaching program on patient outcomes and overall satisfaction.

Methods: We propose a randomized controlled trial. A total of 36 oncologists (18 oncologists per arm) and 720 patients are expected to be enrolled in the study. Participating oncologists will be stratified into tertiles based on their patient satisfaction (Press-Ganey) scores and randomized to either the control (no coaching) or intervention arm. A total of 20 patients per physician in the intervention and control arms will be recruited. Analyses will utilize direct observation and physician surveys to assess the acceptability of the intervention and effect on key patient-centered communication behaviors (Aim 1 &2). Patient and caregivers will be surveyed regarding their experiences of care to assess their perceptions of physician-patient communication and quality of care (Aim 3&4).

Results: n/a Implications: This randomized study will define the impact of peer feedback on physician communication behaviors and the patient experience of cancer care. Request for feedback: Feedback regarding measurement of physician behavior change is sought to strengthen the study's validity.

## WIP.2.6
## What they say and what they do: Faculty perceptions of communication skills teaching in the clinical setting

**Nicoll Manhica, University Of Iowa Carver College Of Medicine**
**Marcy Rosenbaum, University Of Iowa Carver College Of Medicine**
**Katherine White, University Of Iowa Carver College Of Medicine**
**Patrick Barlow, University Of Iowa Carver College Of Medicine**

Background: The primary objective of the mixed methods study is to determine the impact of an intervention demonstrating methods to teach about communication skills (CS) on if and how faculty teach about CS to medical students during clinical rotations. The study also investigates methods faculty use to teach CS, opportunities and barriers to teaching.

Methods: All faculty and second year medical students rotating on the required Outpatient Internal Medicine (OIM) clerkship during the study period (May 15 – Aug 15) were invited to participate in the study. Focus groups with medical students and interviews with faculty were conducted. Faculty were observed for 2-4 hours teaching medical students in the clinic. Faculty participated in a workshop emphasizing methods of incorporating CS teaching in the clinic. Audiotapes and observation notes were transcribed and entered into QSR NVivo10.

Preliminary Findings: Subjects included OIM faculty (N =29) and second year medical students (N=45). 63 faculty-student encounters in the context of patient care (cases) were observed. Three main approaches to teaching were identified including role modeling, faculty observing medical students, and responses to case presentations. The majority of faculty interviews and focus group participants described role modeling as the most commonly used clinical teaching technique followed by case presentation feedback and direct observation. While these methods rarely incorporated direct CS feedback prior to the intervention, select faculty described a greater incorporation of direct CS feedback post-intervention.

Preliminary Implications of research: Findings from this study have implications for faculty development directed at explicitly incorporating CS teaching into clinical teaching encounters. Increasing CS teaching during clinical learning has the potential to help students enhance their CS throughout their medical training. The study will investigate the impact of a intervention on faculty's teaching of these vital CS.

Request for Feedback:  Feedback requested on strength of evaluation of the changes in faculty teaching CS through the use of both quantitative observation as well as interviews. Additionally, feedback on the incorporation of student feedback into a meaningful discussion for future intervention. Further feedback on the evaluation of the perceived methods of CS teaching compared to the observed methods of CS teaching.

# Fringe

## F.2.1
## An image worth a thousand words – How pictographic design can redefine health communication

**Duarte Brito, Unidade de Saúde Pública - ACES Lisboa Central**
**Pedro Almeida, Faculdade de Belas Artes – Universidade de Lisboa**

Background: Health promotion is a key process to improve population's health and health literacy is one of its main branches of action. Communication using visual aids like icons and images can be easily understandable by most patients with low literacy levels. Recently a study estimated a 72,9% prevalence of limited health literacy in Portuguese population and medical information translation into graphical concepts can be an innovative and practical solution to improve population's health status. The aim of this session is to stimulate participants (both healthcare workers and stakeholders) to produce visual contents to address communication barriers with their patients/community, by using pictograms and infographic representations of various medical contents.

Methods: An introduction on visual communication will be presented, focusing its efficiency in translating complex text messages into images or schemes (5 minutes). Some example of medical information represented in infographic and pictographic design will be showed and discussed (5 minutes). After a brief exposition of contents, participants will be asked to translate a short but complex message into a graphical idea (5 minutes) that could be understandable by an analphabetic patient. This a crucial process in changing participant's mind-set from words to images, which can be used in their daily work. In the end of this sessions we will include some take home messages for quick and easy adaptation of text messages into images (3 minutes). A 30 minutes session will be essential to a more interactive session, enable sharing of experiences between participants and brief feedback on their work (2 minutes per group).

Evaluation: No formal evaluation will be used.

## F.2.2
## Innovation & creativity as business drivers for better healthcare communication

**Peter Vermeir, Ghent University Hospital**
**Sophie Degroote, Ghent University Hospital**
**Rik Verhaeghe, Ghent University Hospital**
**Jamie Anderson, Antwerp Management School**
**Dirk Vogelaers, Ghent University Hospital**

Background: In order to face the multiple challenges in hospital care, as there are, patient centered care with high levels of quality and safety, changing consumer expectations and demands and shrinking healthcare resources, innovation and creativity are two important values. Efficient and effective communication is needed for the complex care provided by hospitals and healthcare organizations in general. Health care workers are engaged in communication processes on a daily basis and their innovative approach could break down the existing barriers to good communication and hence be a fundamental source of progress for healthcare systems around the world.

The aim of this session is to inspire the attendants with simple, feasible creative exercises in order to improve their interprofessional communication skills.

Methods: During this session, attendants will be invited to participate in 3 creativity exercises. During the first 5 minutes, an introduction will be given. Each exercise will then take about 6 minutes. The remaining time will be used to reflect on how these exercises can foster creativity and innovation, ultimately leading to improved healthcare communication. These exercises can be incorporated in the curriculum of health care professionals (nurses, physicians, psychologists), since it is important that we learn our students and health care professionals to be creative and to think in an innovating way with empowerment to prepare and improve patient outcomes and the need to reduce costs.

Exercise 1: 'Whodunnit'
First minute of the movie – 3 minutes group discussion (+- 5 people per group) – continuation of movie (1 minute) – 1 minute general discussion

Exercise 2: 30 blank circles
3 minutes to draw, 3 minutes discussion

**Exercise 3: "Read all instructions first"**
5 minutes exercise, 1 minute discussion

General discussion

Evaluation: In 2015-2017 222 nursing students of Ghent University (Belgium) performed an innovation task, using a web-based tool. The ideas were narrowed down to 20 feasible ideas (peer review), which were all presented using short presentations (pitches). Five ideas were fine-tuned by a business model and implemented in daily nursing.

# Parallel Session 6

## Oral Presentations

### O.28.1
### "But nobody had told me how to do it": video-supported health literacy acquisition for citizens

**Christina Birkemose, Region Zealand**
**Anne Dalhoff Pedersen, Region Zealand**
**Kristine Sorensen, Global Health Literacy Academy**

Background:  Almost one in three lives with chronic conditions in Denmark and it is likely to increase in the future. To prevent disease and provide better support to citizens aged 55+, the Region of Zealand has initiated a policy programme called The Patient as Partner. The programme includes a web-based application using videos to share citizens' experienced needs and everyday life solutions as well as recommendations from health professionals to live a good life in spite of chronic disease.

Methods:  To develop people's health literacy the web-based application called "the Health Profile" includes more than 700 videos with local citizens, their relatives and professionals. They last 1,5-4 minutes each and cover three action areas: 1. Diagnoses, Themes and Lifestyles. Also, tests and written material are available for citizens to use interactively from the website.

Findings:  A recent evaluation (Dec 2017) highlights that the web-based application is well-received by elderly citizens in the Region by providing an opportunity to access knowledge that would not otherwise be available for them. The accessible information is delivered in an understandable, feasible and targeted way. The videos are specific, orientated towards action and empowerment and often they address complicated health issues such as COPD and mental health. The application is used as an active part of informed decision-making in clinical settings in the region allowing people being an active partner in finding solutions for their health and wellbeing.

Discussion:  The web-based innovative application has proven to bridge the gap of limited health literacy by avoiding medical jargon and present information based on citizen's own experience and reflections to which many people can relate. Notably, the application helps develop the health literacy of patients, relatives and professionals in a dignified manner with respect for diversity in needs. The easy accessibility allows patients with chronic diseases to take ownership of their health, flourish and develop their potential because they can better understand what is going on and how they can positively influence their condition.

### O.28.2
### Overcoming language and cultural barriers to participation in clinical trials

**Robyn Woodward-Kron, University Of Melbourne**
**Jo-anne Hughson, University Of Melbourne**
**John Hajek, University Of Melbourne**
**Anna Parker, University Of Melbourne**
**Tuong Phan, St Vincents Hospital**
**David Story, University Of Melbourne**

Background:  People from culturally and linguistically diverse backgrounds (CALD) remain underrepresented in clinical trials due to a range of language, literacy and cultural factors such as the literacy needed to understand lengthy, paper-based Participation and Information Consent forms (PICF). These barriers can be compounded when this population is ageing. Exclusion of these populations contributes to health inequalities for migrant groups; it also limits the generalisability of medical research findings. There is some evidence that multi-media communication technologies can assist researchers to overcome these barriers to research participation, yet ethics committees need to be confident that novel consent processes adhere to ethical principles.

Methods:  This paper reports on a program of research to implement mobile (m)Health ethics and medical research information for culturally and linguistically diverse (CALD) patients. We developed a prototype mobile health (m-Health) resource informed by older Italian-Australians and their families, clinical trial researchers and recruiters, and hospital ethics administrators. The prototype, Let's talk medical research/ Parliamo di ricerca medica, is an

interactive tablet delivered web-app, providing bilingual audio-visual research information for patients and their families, including exploratory technology informed consent processes.  A qualitative, proof of concept study into the acceptability, feasibility, and utility of the prototype resource was conducted with patients and their families at **St Vincent's Hospital, Melbourne; in community settings; and with clinical trial administrators from the Australian** and New Zealand College of Anaesthetists.

Findings:  The prototype web-app found broad acceptance with trial administrators and to some extent with the older English speaking patients and with the older Italian speaking participants.  Wi-fi connectivity and noisy hospital environments presented problems when showing audio-visual material. A major problem for some participants with minimal schooling (e.g. 4 years) was understanding ethical principles and the purpose of clinical research in hospitals, despite supporting images, bi-lingual text and explanations.

Discussion:  Communication technologies such as an mHealth resource have potential to change the ways in which patients are recruited to clinical trials so that the process and outcomes are more equitable and generalisable. Changes are needed at the policy and practice level to facilitate the adoption of innovative, inclusive, consent processes.

## O.28.3
## Telephone Communication - The PHONE Checklist

**Louise Merker, Musgrove Park Hospital**
**Francesca Guest, Musgrove Park Hospital**
**Ravi Patel, Musgrove Park Hospital**
**Isabel White, Musgrove Park Hospital**
**Ian Hunter, Musgrove Park Hospital**

Background:  Telephone communication between doctors is paramount in the care of patients. It is recognised that there is huge variability in the effectiveness of this communication. Despite the design of tools such as SBAR and MIST, miscommunication remains a common finding in root cause analyses into failings in medical care. We set out to establish the barriers to effective telephone communication and to design a checklist that would facilitate consistent and structured communication.

Methods:  A working group of doctors of various grades was established. The project method involved the following steps-

1. A 'brainstorming session' between doctors of all grades to establish a list of the barriers to effective communication for both the 'caller' and 'call recipient'.

2. A review of Serious Untoward Incidents (SUIs) over a 1 year period where telephone communication failures had been identified, to assess the impact of ineffective telephone communication on patient outcome.

3. To design and test a checklist (using the same principles as the WHO theatre checklist) that could be used to structure and standardise telephone communication in a way that would overcome the barriers identified in steps 1-2. The final outcome of the checklist would be an agreed action plan between both parties which would be clearly documented.

Findings:  Barriers to effective telephone communication were broadly in 4 categories- issues with preparation; distracting factors; anxiety and 'status' factors and documentation. Analysis of SUIs identified potential patient harm as a direct result of poor telephone communication. The PHONE checklist (see image below) was designed, tested and refined using the PDSA method.

Discussion:   The PHONE check**list received universally positive feedback and is a key priority for our hospital's** Patient safety Improvement Board to be introduced as the standard means of telephone communication between all doctors throughout the organisation. It has been designed to be widely applicable and the use could be spread easily to other organisations.

Telephone communication can be improved by using a simple checklist and incorporating it into medical culture. Feedback has demonstrated that callers feel more prepared and less anxious making calls and that documentation has improved.

**Date:** _____ **Time:** _____

Affix patient label here

## Telephone Referrals Checklist:

This checklist is designed to guide you through telephone referrals; ensuring all the relevant information is available before making a call and an agreement is reached and documented before hanging up.

| **P**reparation | • Patients details (name/MRN/DOB/location) ☐ <br> • Patients notes available ☐ <br> • Observation chart available ☐ |
|---|---|
| **H**elp required | • What is your clinical question or concern? <br> • Level of urgency:  Advice ☐ <br>  Review in next 24hrs ☐ <br>  Review immediately ☐ |
| **O**bservations | • HR _____ BP _____ Temp _____ Sats _____ <br>  Urine output _____ Drain output _____ <br> • Last FBC, U+E, LFT and CRP available ☐ <br> • Blood gas result available ☐ |
| **N**otes & relevant information | • Relevant past medical history ☐ <br> • Current antibiotics or anticoagulation ☐ <br> • Previous imaging ☐ <br> • Pre-admission dependence level: Independently living ☐ <br>  Some carer assistance ☐ <br>  Full assistance ☐ <br> • Treatment ceiling:  TEP form complete ☐ <br>  HDU/ITU escalation ☐ <br>  Ward based care only ☐ <br> • Next of kin details |
| **E**nd result | • Who did you speak to: _____ <br> • Contact details: _____ <br> • Agreement reached? ☐ <br> • Advice given (confirm with call recipient): |

Separate detailed entry been made in inpatient notes:  Yes ☐  Not relevant ☐

## O.28.4
## The use and effects of an evidence-based health information website (Thuisarts.nl / HomeDoctor)

**Ton Drenthen, Dutch College Of Gps**
**Roy Beijaert, Dutch College Of Gps**

Background:  Many patients seek online for health information and could use this information to decide whether to visit a doctor. in theory, patients using online health information are well informed and make a better assessment on the need to visit a doctor, leading to lower usage of healthcare. In 2012 the Dutch College of GPs (NHG) launched an evidence-based health information website, named Thuisarts.nl (HomeDoctor).

Methods:  The content of the website is based on evidence-based practice guidelines developed by NHG, and includes medical information and patient education. The information is easily accessible and understandable using plain language. It also includes illustrations, short videos, patient decision aids and e-health self-management tools. Since its launch Thuisarts.nl has become the most visited independent health information website in the Netherlands. We carried out a survey among GPs / members of the Dutch College in 2013, 2015 and 2017, and an interrupted time series analysis of observational primary care data of  health care use in the Netherlands among users and nonusers of the website from 2009 to 2014.

Findings:  In the Netherlands, more than 95% of the GPs use Thuisarts.nl as a supportive tool

during their consultations and patients subsequently look up the provided information online. In 2017 Thuisarts had more than 15 million unique visitors on a population of 17 million people. The GP consultation rate in The Netherlands showed a 12% decline two years after the launch of this website. This effect was most prominent for phone consultations and present in all subgroups of sex, SES and age, except for the youngest age group.

Discussion: Thuisarts.nl is a well-known website that is used by most GPs in the Netherlands. The effect of providing evidence-based online health information on healthcare usage on a population level was not yet known. Our findings reveals that e-health can be effective to improve patient education and to reduce health care utilization in times of increasing health care costs.

## O.28.5
## Development and evaluation of an innovative computer-based decision aid to enhance informed participation in colorectal cancer screening

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**Tom Broens, Department of Medical Informatics, Amsterdam Public Health research institute, Academic Medical Centre Amsterdam, University of Amsterdam**
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In the Dutch colorectal cancer screening programme, individuals are expected to make an autonomous, informed decision about screening participation. This is a challenge for screening invitees, especially for those with inadequate health literacy, i.e. the ability to access, understand and use health information. The screening programme is complex and invitees have to make a decision about participation without initial support of a health care professional. Individuals with low health literacy have been shown to experience more uncertainty in their decision than those with adequate health literacy. Following the International Patient Decision Aid Standards (IPDAS) and a framework on health literacy skills for informed decision making, we developed a digital decision aid prototype that is sensitive to individuals with lower health literacy. The decision aid will be qualitatively pre-tested among 30 participants with low and adequate health literacy for accessibility, acceptability and usability in February 2018. After further adaptation on content and design, the decision aid will be pilot-tested among 200 individuals eligible for colorectal cancer screening with varying levels of health literacy in May 2018. Outcome measures are decisional conflict, knowledge, attitude, behavioral intention, anxiety and risk perception. The decision aid contains elements including video, audio and explanations of medical words to improve the comprehensibility of the screening information. A values clarification exercise was developed to support appraisal of the screening information and weigh up potential harms and benefits of colorectal cancer screening for personal relevance. The development of a decision aid is an essential first step in promotion equal opportunities for informed decision making in colorectal cancer screening. The study provides a basis to study the effect on the decision aid on informed decision making among participants with lower health literacy. The findings from the pre-test and the pilot study will be presented at the conference.

## O.29.1
## A language access initiative increases professional interpreter use in primary care

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**Celia Kaplan, University Of California San Francisco**
**Steven Gregorich, University Of California San Francisco**
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Background: Professional interpreter use is fundamental to improving communication across language barriers. We studied the impact on use of professional interpreters in primary care of a systems improvement initiative to institute a language certification testing program in combination with increased access to professional interpreters via videoconferencing.

Methods: We recruited ethnically Chinese and Latino adult patients for a telephone interview within one week of a primary care visit at an academic medical center in the U.S. pre-initiative (Feb-May 2014; n=314) and post-initiative

(Jan 2016-July 2017; n=1181). If, by their own selfreport, the patient spoke English 'very well', or spoke 'well' and preferred their healthcare in English, they were considered an English speaker and their visits were excluded from this analysis (n=456). If the physician passed the language certification test or, if they did not test, but their mean patient language ability rating was ≥4 (very good/excellent), visits were considered language concordant and excluded from this analysis (n=332). The remaining 707 visits were categorized as either discordant (patient spoke English 'not at all'/'not well' and physician self-reported language ability was none/poor/fair) or partially concordant non-English (patient spoke English 'not at all'/'not well' and physician self-reported language ability was good/very good/excellent but they either failed the test or, if they did not test, mean patient rating was ≤3); or partially concordant English (patient spoke English 'well' and physician selfreported language ability was none/poor/fair). We then compared rates of professional interpreter use for discordant and partially-concordant visits pre- and post-initiative.

Findings: Overall there were 544 discordant, 106 partially concordant non-English, and 57 partially concordant English visits. For discordant visits, professional interpreter use increased from 72% to 76% (p=0.113); for partially concordant non-English visits, from 22% to 32% (p=0.049); for partially concordant English visits, from 17% to 24% (p=.725); and, for all discordant and partially concordant visits combined, from 58% to 66% (p=.003).

Discussion: Professional interpreter use increased significantly after implementation of a certification program coupled with increased access to professional interpreters. Use remained relatively low, however, for all partially concordant visits; this group merits further study to understand implications for communication and patient outcomes.

## O.29.3
## Intercultural communication in Indigenous health care: exploring challenges and strategies for improvement.

**Anne Lowell, Charles Darwn University**
**Anna Ralph, Menzies School of Health Research**

Background. Achieving effective communication in health care is particularly challenging when staff and patients do not share the same language and cultural background.  At Royal Darwin Hospital (RDH) in the Northern Territory of Australia more than 50% of patients are Aboriginal, the majority of whom speak an Aboriginal language as their primary language, uptake of interpreter services is extremely low and hospital staff turnover is high.

Methods. In a collaborative study involving researchers, health and interpreter services we used both qualitative and quantitative methods to explore challenges in intercultural communication as well as strategies for improvement. In this presentation we will focus on the qualitative findings from 26 in-depth interviews with hospital and interpreter service staff as well as consumers.  Interviews were conducted in the preferred language of participants, translated into English and transcribed. A collaborative inductive analysis was conducted to identify key themes.

Findings. The study revealed a range of system level and structural barriers, including inadequate documentation of patient language information, challenges in making an interpreter booking, limited availability of interpreters on-site and time constraints. Other barriers related to individual perceptions, attitudes, skills and knowledge such as: incorrect assumptions about communication effectiveness and risk; different communication expectations and practices for different groups; unclear and ad hoc processes for deciding when an interpreter is needed as well as inadequate support to develop competence in intercultural health communication for staff, interpreters and consumers. As a consequence of these barriers a culture of 'getting by' appears to have become entrenched, affecting even staff who recognise the serious extent and consequences of ineffective communication. Although positive benefits of working with an interpreter by those who used them were strongly endorsed it was rarely a consistent practice.

Discussion. Co-ordinated interventions across systems of governance, patient information, interpreter employment and engagement as well as strategies to increase intercultural health communication competence are needed. Urgent action is essential to achieve equity, safety and quality in health care for Aboriginal people who do not speak English as their primary language. This work has informed a second stage of the project which has now commenced.

## O.29.4
## The interpreters' influence on patient participation in medical consultations: a video analysis

**Demi Krystallidou, University of Leuven**
**Peter Pype, Ghent University**

Background: In monolingual consultations patient participation (PP) might be compromised by the presence of the patient's companion, as the latter might be acting in ways that decrease the interaction time between the patient and the doctor, might even respond on the patient's behalf and their mere presence in the consultation room might inhibit patient's disclosure. However, little is known about PP in interpreter-mediated consultations (IMCs) where interpreters might additionally edit or even omit utterances and where the interpreter's presence affects the interaction dynamics.

We wanted to investigate i) how PP in interaction occurs in IMCs when the doctor provides information to the patient or tries to elicit information from them; ii) how the interpreter's presence in the consultation affects PP.

Method: 20 authentic video recorded IMCs with Dutch speaking doctors, professional interpreters and migrant patients were coded individually by two coders and were analysed by using the A.R.T. framework, an analytical tool for the study of participation in video recorded IMCs. We coded 521 doctor utterances by means of which doctors either provided information or tried to elicit information from the patient. In 448 of them, the interpreters established a participation and engagement framework (PEF) with the patient (i.e. gaze and body oriented to the patient) while translating the doctor's utterances. In 48 cases the interpreters established a PEF with the doctor and in 25 cases the interpreters avoided establishing a PEF with either of the participants while translating the doctor's utterances.

Findings: When the interpreters established a PEF with either of the participants, next to the verbal interaction they used, they demonstrated specific patterns in gaze-, gesture- and body orientation that allowed the interpreters to enable, foster and /or rectify the patient's participation.

Discussion: Doctors and interpreters should become aware of their own and each other's actions (verbal and non-verbal) and their impact on PP in the consultation.

## O.29.5
## Working with Interpreters in Adolescent Healthcare: Conflicts of Positioning in Family Communication

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**James Roberts, Medical University Of South Carolina College Of Medicine, Department Of Pediatrics, Division General Pediatrics**
**Elizabeth O'Brien, Medical University Of South Carolina College Of Medicine, Department Of Pediatrics, Division General Pediatrics**
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Background: According to 2015 Census data, 350 languages are spoken in the US and 25 million people have limited English proficiency (LEP) when speaking to healthcare providers. Though US law requires providing language access to patients with LEP, the quality of interpreted services can compromise healthcare and patient safety. Much of research on physicians working with interpreters involves adult patients and in-patient care. Based on previous descriptive evidence from a pediatric clinic caring for Spanish speaking patients in the US, this secondary analysis asks how working with interpreters affects family communication with physicians.

Methods: This qualitative study design used interactional sociolinguistics to examine 22 adolescent-parent-physician-interpreter interactions in a primary care setting, with trained interpreters and families whose primary language was Spanish. Encounters were recorded and transcribed, then coded by a two-person team, one who spoke English as a primary language and one bilingual who spoke Spanish as a first language and was a certified interpreter. Positioning theory was applied to interactions to examine roles taken or attributed, stances in storylines, and specific speech acts and consequences. As a branch of discourse analysis, interactional sociolinguistics allowed deconstruction of the medical encounters to assess effects on family communication of interpreter coordination and topic negotiation.

Findings: Omissions constituted the most common speech practice flaw observed, especially when physicians gave over-long explanations and provided the interpreter little opportunity to relay total messages. This practice resulted

in missed information for parents and often positioned the parent as an excluded participant. The second most noted practice was initiating questions to the adolescent, who often did not have sufficient information to respond nor were these conversations interpreted to the mother. When mothers tried to introduce information or a question, side editorializing by the interpreter or physician, the third most common practice, was not accessible to the mother with uninterpreted sequences. Few instances of descriptions as narratives from parents appear, as observed frequently in monolingual pediatric encounters.

Discussion: A lack of training for physicians and interpreters on how to work together with parents may explain common flaws in interpreted pediatric encounters. Examples provide a basis for curriculum development.

## O.30.1
## Effectiveness of an undergraduate training in breaking bad news from an analogue patient perspective: A continuation study

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**Céline Bourquin, Liaison Psychiatry, Lausanne University Hospital (CHUV)**
**Friedrich Stiefel, Liaison Psychiatry, Lausanne University Hospital (CHUV)**
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**Alexandre Berney, Liaison Psychiatry, Lausanne University Hospital (CHUV)**

Background. This continuation study evaluates the effectiveness of an individualized training in Breaking Bad News (BBN) for medical students from the perspective of analogue patients (APs). Our previous study showed that medical students benefited from a simulated patient (SP) encounter, followed by an individual supervision based on the videotaped SP encounter, with a significant increase of their communication performance in BBN post-training as rated by experts. This continuation study aims to (i) explore the AP perspective on **students' communication** improvement following individualized training and (ii) better understand the benefits of such training.

Methods. The initial material consisted of pre- and post-training videotaped interviews of 236 fourth-year medical students delivering the bad news of advanced cancer with limited therapeutic options (palliative chemotherapy) to SPs. Sixty analogue patients – healthy untrained observers – were recruited from the general population. They were asked to "put themselves in the patients' shoes" and rate their perceptions of 120 randomly selected interviews (60 pre-training and 60 post-**training) of 60 students. Each interview was rated by five APs who evaluated students'** competence as well as their satisfaction, trust, and liking (average ICCs ranged from .59 to .64).

Findings. This study complements our previous findings and shows that, from the AP perspective, medical students significantly improved their communication competence in BBN after training. Paired sample T-tests indeed show that APs evaluated the students as more competent (t(59) = 2.76, p = .008), more satisfying (t(59) = 2.75, p = .008), and more trustworthy (t(59) = 4.00, p < .001) at post-training (as compared to pre-**training). In the other hand, APs'** liking for the physician did not differ between pre- and post-training. Further analyses showed that behavioural **changes significantly linked to APs' increased satisfaction at post**-training were more emotional responsiveness, positive talk, information giving, biomedical counselling, and prudent tone of voice.

Discussion. This continuation study confirms that individualized BBN training approach at the undergraduate level **is effective not only from experts' viewpoint, but also from the AP perspective.**

## O.30.2
## Exploring Life with a Long-Term Condition Using Asynchronous Online Communication

**Andy Ward, Leicester Medical School**
**Jane Bethea, Leicester Medical School**
**Ron Hsu, Leicester Medical School**

Background: Online communication between patients and doctors will play an increasing role in health care in the future. In 2016, NHS England announced that it had allocated £45 million over three years to support the purchase of online consultation systems by practices. Students need to develop the specific communication skills required to deal with this technology, without losing a patient-centred focus. Using a shared electronic patient record, students **can explore aspects of a patient's experience of** life with a long-term condition.

Methods : Using Patients Know Best – the world's first fully patient-controlled online medical records system – students work as a group to communicate electronically with a patient over 5 months. Students are expected to find out about the social, psychological, and emotional impact that living with a longterm condition has on the patient. The students also explore whether the patients have always received patient-centred care. Tutors can monitor communications and intervene where necessary. Feedback is collected from patients and provided to students.

Findings:  The teaching has enabled students to have early patient exposure in a safe environment.  Students and patients have quickly adapted to the technology.  The asynchronous nature of the communications has meant that students have had to adapt their approach from more traditional consultation models.  71% of students thought that e-consultation would be relevant for their future career.  91% believed that different techniques were required compared to face-to-face consultations - 49% thought they were able to identify these without receiving any specific teaching on them.

Discussion:  A shared electronic patient record provides an excellent opportunity for medical students to explore holistic elements of a patient's life with a long-term condition.  Communicating electronically appears to require a different set of skills to more traditional consultation methods. The asynchronous nature of the communication provides challenges not addressed in current teaching.  Medical students need to be equipped with the skills needed to communicate electronically with patients. Current medical curricula currently focus on more traditional models of the consultation. Further research is needed to establish best practice in this rapidly growing area.

## O.30.3
## Narrative Medicine in the Middle East: Measuring Medical Student Learning from a Cancer Survivor Booklet

**Alan Weber, Weill Cornell Medicine In Qatar**
**Tarek Taha, Weill Cornell Medicine In Qatar**
**Sara Alhousseiny, Weill Cornell Medicine In Qatar**
**Abdulrahman Al-Abdulmalek, Weill Cornell Medicine In Qatar**

Background: The research was a mixed-methods study to determine what medical students learned about cancer patients and service learning after participating in a narrative medicine project in Qatar (publishing a patient peer-education health booklet of cancer survivor stories).

Methods: A convenience sample of 9 medical students wrote a cancer booklet, answered an online questionnaire, and sat for 20-minute semi-structured interviews.

Findings: 60.0% of students agreed and 20.0% strongly agreed that the experience changed their view of cancer patients. 80.0% of students strongly agreed, and 20.0% agreed that service learning should be incorporated into medical education. The following selected themes (8 total themes identified) from the free response questions and interviews were coded using NVivo 11.0: 1. learning about cancer patients: "I learned that cancer is not [only an] illness [but] also affects the community as a whole. That it commonly affects those who are taking care of others; the mothers, fathers, the grand parents, and care givers." 2. contribution to the patient: "The patient told me that he wanted to share his story and he thought this booklet was a great idea because he wanted other people to realize that it isn't the end of the world if they're diagnosed with cancer." 3. attitudes to cancer in Qatar: "I understand that in [this] culture that there is a lot of stigma surrounding cancer and people are afraid to even mention the term – I think her family didn't really understand….at one point she had to remove her uterus, and they said, 'what do you mean, how are you going to get married in the future?'"

Discussion: Service learning narrative medicine experiences may be valuable as an elective learning opportunity to contribute to the community and teach medical students about the patient perspective of disease, socio-economic factors and family dynamics in healthcare, and the role of narrative in constructing knowledge about a patient beyond the standard clinical interview.

## O.30.4
## Patients with chronic diseases and family members of patients with dementia sharing their stories with students in healthcare professions and with health professionals

**Judit Madsen, CAMES- Copenhagen Academy For Medical Education And Simulation**

**Anne Marie Rieffestahl, CAMES- Copenhagen Academy For Medical Education And Simulation**

Background: The concept "Patients as Teachers" provides students in healthcare professions and health professionals with the opportunity to learn directly from patients with chronic diseases, as well as from family members of patients with dementia. By sharing their stories and experiences, patients and family members play an important role in preparing students and health professionals to understand and handle their unique needs and challenges with respect.

Methods: Patients and family members share their experiences through first-hand stories. The students are divided into small groups to ensure dialogue-based teaching. 80 patients and family members are participating in the concept. They differ with respect to gender, age and educational background. The recruitment and training of patients and family members are ongoing. To be a part of the program, they must have at least 2 years of experience as a patient or a close relative of a dementia patient. The main topics in the training for patients and family members are how to convey their narratives and engage in dialogue-based teaching.

Findings: Patients with chronic diseases and family members of dementia patients have been teaching in our program since 2014. 819 students and 225 health professionals have participated in the courses in 2017. The program receives extremely high ratings from students and health professionals. They find that these real life experiences create an opportunity for authentic learning about the needs and challenges that patients and family members face.

Discussion: Patient and family members describe their participation as a win-win situation. They share their stories with students and health professionals, in turn, they are inspired by the students' questions. The interaction between patients and students and the various learning environments ensure that patients and family members stay authentic.


## O.31.1
## Being a Patient in the 21st Century: A Tale of Perceived Participation

**Rhea Rocque, Laval University**
**Yvan Leanza, Laval University**

Background: Patient participation is advocated for in many countries and has become a priority in healthcare. Yet, patient perspective concerning this participation is not well known. Moreover, studies suggest there may be differences in patient participation according to migration and linguistic status. Since patient participation is described as being most visible during a healthcare consultation, the two objectives of this study were a) to explore patients' perceptions of participation in medical consultations with physicians, and b) to explore potential influences of migration and linguistic status on these perceptions of participation.

Methods: A grounded theory approach was used and fifty-nine participants, from various ethnic groups, took part in individual semi-structured interviews. An inductive qualitative content analysis was conducted on the transcribed interview data, and a theory explaining the findings was developed.

Findings: Patients perceived engaging in various active roles before, during, and after the consultation. For instance, they recounted preparing for the consultation, expressing their preferences or disagreements during the consultation, taking part in decision-making, and seeking information from various sources afterwards. Patients also recounted nonparticipative experiences (e.g. not expressing one's viewpoint), although these were less frequent. Participants facing a language barrier raised more challenges concerning participation (e.g. harder to express one's viewpoint in a second language) and facing a language barrier seemed to be the personal characteristic that influenced patients' perceived participation the most.

Discussion: Patients perceived playing active roles in most of the experiences discussed. Patients also described that their participation depended, partly, on the physician's perceived degree of openness toward patient participation. Consequently, physicians' perspective of patient participation should be explored and considered when intervening to promote patient participation. Moreover, findings suggest that patients have a broader definition of patient participation, compared to some of the previous research which operationalizes patient participation as participation in decision-making. Contextual influences underlying patients' perceptions of participation were explored (e.g. sociocultural context, healthcare context, power imbalance, and physicians' and patients' individual context), and a theory explaining barriers and motivators to patient participation is presented and discussed.

**O.31.2**
**Holistic Needs Assessment: Changing Consultation Dynamics to Support Patient Self-management**

**Austyn Snowden, Edinburgh Napier University**
**Jenny Young, Edinburgh Napier University**
**Marie-Therese Lussier, University of Montreal**
**Claude Richard, University of Montreal**

Background:  Holistic needs assessment (HNA) helps patients articulate their wider needs during consultation. The study objective was to establish how HNA changes consultation dynamics. It is hypothesised that HNA will support greater patient participation, facilitate shared decision-making and increase self-efficacy.

Methods:  Randomised controlled trial. Three outpatient oncology clinics in West of Scotland recruited patients with neck or colorectal cancer who had received treatment. Control group entailed routine consultation. Intervention group patients completed HNA before consultation then the clinician used it to guide consultation. All consultations were audiorecorded. Patient participation was determined by MEDICODE: dialogue ratio (DR) and preponderance of initiative (PI) within consultation. Shared decision-making with CollaboRATE; self-efficacy with Lorig's measure.

Results:  Fifty-five people were randomised to intervention, 61 to control. More patient concerns were discussed in the intervention group (8.9) than control (6,6) (p=0.00). Emotional concerns were discussed more frequently (respectively 27,1% and 19,4%, p=0.01), and clinicians expressed more support (14,4% compared to 10,2%, p=0.08) in intervention group.

Discussion was initiated mainly by clinician in both groups (76,4%), and participation tended to monologue in both (54.1%). However, patient initiative was significantly higher in experimental group when discussing control of problems (respectively 40,0% and 24,1%, p=0.03). Dialogue was also when discussing symptoms (respectively 75,1% and 63,6%, p=0.01). Self-efficacy was higher in the experimental group (mean Lorig: 8.3 v 7.6 p=0.093), as was CollaboRATE (25.1 v 23.4, p=0.121), though neither was statistically significant.

Discussion:  These preliminary results showed HNA changed the dynamics of the clinical consultation. Patients discussed more concerns in general, and more emotional concerns in particular. Patient participation increased when discussing symptom control, suggesting patients would self-manage better. This is supported by the higher self-reported sense of collaboration and higher self-efficacy levels in the experimental group. These trends may become statistically significant when the study reaches sufficient power. Regardless, current results show that incorporating mechanisms designed to support discussion of personal needs changes the focus of the consultation, and that these changes enhance patient self-management. Strengths and weaknesses will be discussed, along with a more nuanced analysis of the impact of HNA on consultation style.

**O.31.3**
**Impact of patient participation in health service development**

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**Mette Haaland-Øverby, Norwegian National Advisory Unit On Learning And Mastery In Health, Oslo University Hospital**
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Background: Collaborative processes involving communication between professionals and patients are prerequisites when designing services and interventions that support health management. Still, patient participation in health service development is not a common practice. The objective of this scoping review is to give a comprehensive overview of how the literature portrays approaches to user involvement and potential impact of patient participation in health service development for the good of people living with long term conditions. Aiming to strengthen the evidence-base for patient participation, our main research question is: What approaches to user

involvement and potential impact of patient participation in health service development are described in the literature?

Methods: We searched 8 literature databases and retrieved and reviewed full text articles that met the inclusion criteria. Included articles had reported some type of impact due to patient participation in health service development. We complied with the Arksey and O´Malley´s framework for scoping studies in the review process and carried out a thematic analysis to synthesize the gathered data.

Findings: A total of 7552 titles were attained. Of these, 8 literary reviews and 18 studies were included in this review. Literary review findings call for strengthening the evidence-base for efficient approaches to user involvement relative to various contexts, and impact of patient participation in health service development. Study findings reveal a great diversity in described approaches to user involvement, ranging from patients being consulted to user representatives being equal partners to professionals in collaborative processes. Impact of patient participation was identified both as a result of the collaborative process and communication between professionals and patients and relative to the service development interventions´ form and content, accessibility, relevance, efficiency and use of resources.

Discussion: This review contributes to an enhanced understanding of how patient participation is understood and practiced and of various impact that the collaboration and communication between professionals and patients may have in health service development. Findings can encourage professionals to carry out health service development with patient participation and be used to facilitate good communication and constructive collaboration between professionals and patients in processes aimed at developing or improving health services.


## O.31.4
**Participation of breast cancer patients in multidisciplinary tumor conferences in North Rhine-Westphalia – The patient's experiences**

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**Nicole Ernstmann, Center for Helath Communication and Health Services Research (CHSR)**
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Background: In a tumor conference experts from various disciplines discuss about the diagnosis and therapy of breast cancer patients. According to a patient survey in breast cancer centers in North-Rhine Westphalia, Germany, patients are invited to participate in tumor conferences in some breast cancer centers. The invitation depends on several patient characteristics (Ansmann et al., 2014). So far, very few studies investigated how patients experience the participation in tumor conferences and which role the patients have in the tumor conference. This study identifies the experiences of breast cancer patients in tumor conferences.

Methods: Data from two consecutive years of an annual postal survey of patients with primary breast cancer were combined. Data was collected between February and July 2015 (response rate 72%) and 2016 (response rate 73%) from n=8937 patients after hospital discharge from 86 breast cancer center hospitals in North Rhine-Westphalia, Germany. Standardized survey questions were analysed descriptively and open questions were analysed by qualitative content analysis.

Findings: Around 9% (n=765) of the patients were invited to participate and 5% (n=409) reported actual participation in a tumor conference. About 42% (n=3228) of the non-invited patients would have desired to participate in a tumor conference. On average, the patients spent 20 minutes in the tumor conference and around 74% (n=284) of the participating patients were in company of a relative. The duration of participation and the number of participating relatives varied highly. Nearly 94% (n=351) of the participating patients were able to express their opinion about the subsequent treatment and around 85% (n=316) were involved in the decision making process. Approximately 94% (n=357) of the patients did not regret their participation in the tumor conference. The qualitative analysis of the open question indicated the participation was a supporting and informative experience for most patients. However, some patients reported difficult situations and emotional reactions during and after the participation.

Discussion: The predominantly positive evaluation of the patient's experiences indicates potential benefits from participation in a in a tumor conference for patients. Further research on advantages and disadvantages for patients and particularly on the feasibility from the providers' perspective is necessary.

## O.31.5
## WHEN THE PATIENT IS A CHILD–How children contribute and what they remember about medical visit

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Background: The suggestion to use digital media to facilitate patient-physician communication has been reported in several studies and in an increasingly consistent way during the last years. Pitfalls and benefits are in discussion but little research is being conducted concerning physician's perspectives and practices regarding the use of digital media. This study aims to better understand the utilization of digital resources by Family Physicians (FP) and psychiatrists (PSY) in their personal life and to assess their experience in using these tools to communicate with their patients.

Methods: We used a convenience sample of 143 physicians (94 PCP and 49 PSY). An original questionnaire was built to assess socio-demographic and professional characteristics, digital literacy (access to digital media, use of digital media) and to evaluate perspectives on the use of digital media in patient- physician communication. A Likert scale ranging from "never" to "everyday" was used. Statistical analysis was performed using IBM® SPSS® Statistics v2.2. Descriptive statistics were used, and correlational analysis were performed with the Pearson Correlation Test.

Findings: Physicians were predominantly (75.8%) female with a mean age of 37.3 (SD12.4) and 10.6 years (SD12.24) of clinical practice. Top of FormPhysicians report using mobile phone calls, SMS and e-mail very often (every day scores in 72.5%, 75.8% and 85.9%, respectively), but not to contact patients. Age and clinical experience correlate positively with SMS and e-mail exchange with patients (p<0.01), and negatively with the query of blogs/social networks and use of health and wellness applications ($\rho$=-0.33, $\rho$=-0.26, $\rho$=-0.18, p=0.02 and $\rho$=-0.18; p<0.01). Clinicians consider that there is little benefit in the use of social networks for medical-patient communication privileging the contact by e-mail or phone call.

Discussion: Physicians in our sample are frequent users of digital resources but digital media are not globally used to contact patients. Top of FormE-mail and SMS based-solutions appear to be the most interesting Top of Formcommunication strategies to better help and support patients. It's important to deepen knowledge on the use of these strategies namely in improving patient-physician communication.


## O.32.1
## Shared decision making with older people and informal caregivers; a video observational study

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Background: Shared decision making (SDM) in older patients is more complex when multiple chronic conditions (MCC) have to be taken into account when deliberating about goals and options. The aim of this research is to explore (1) the preferred and perceived roles of older patients with MCC and informal caregivers (IC) in decision making, (2) the preferred and perceived participation of patients and IC and (3)  actual SDM during consultations.

Methods: 108 patients and 68 IC visiting the outpatient geriatric clinic of two hospitals participated in a video observational study. Consultations were videotaped and coded with the adapted OPTION-5 for older patients (range 0-100). Pre- and post-consultation questionnaires were completed. Roles and participation were measured by the Control Preference Scale (% preferred<>perceived active role) resp. Patients' perceived Involvement in Care Scale (PICS; range 0-8).

Findings: The mean age was 78 years, 55% was female. In 63% of the consultations an IC was present. Main preferred and perceived roles in decision making were for patients: 'patient & clinician & IC' 41%<>33%, and for IC:

'patient & clinician & IC' 71%<>55%. Most clinicians favoured dyadic decision making: 'patient & clinician' 39%<>39% or triadic decision making: 33%<>19%. Preferred and perceived participation was for patients 6.6<>5.1, for IC 7<>5. Most frequently discussed decisions were about additional diagnostics, medication, follow up, referral to primary care health professionals and lifestyle. In 88% of the decisions, more options were available, 43% of those options were considered equal. Comorbidities were often discussed (87%) and considered in relation to the decision (73%). The mean adapted OPTION-5 score was 42.5, items about 'team talk' and 'evaluation' scored the lowest (resp. 31 & 36.5).

Discussion: The video observations showed that SDM was applied moderately by clinicians. Older patients and their IC most often preferred a triadic SDM process, but in practice it was more often perceived as dyadic (patient-clinician). The participation of both patient and IC in the SDM process was also lower than preferred at forehand. Interventions to implement SDM should empower both patients and IC and aim at improving clinicians competencies in SDM.


## O.32.2
## Communication on diagnostic testing for (Alzheimer's) dementia: the ABIDE-clinical encounter study

**Leonie Visser, Academic Medical Center / University Of Amsterdam**
**Marleen Kunneman, Leiden University Medical Center**
**Laxini Murugesu, Academic Medical Center / University Of Amsterdam**
**Femke Bouwman, Alzheimer center/VU University Medical Center**
**Wiesje van der Flier, Alzheimer center/VU University Medical Center**
**Ellen Smets, Academic Medical Center / University Of Amsterdam**

Background: The development of novel diagnostic tests for (Alzheimer's) dementia has increased the number of available diagnostic options. This study examined patient-clinician communication as observed during clinical encounters prior to diagnostic testing, involving decisions about diagnostic testing.

Methods: We performed an observational study in the routine diagnostic workup of dementia. In an unselected sample of new patients (N=125) from eight Dutch memory clinics, we audiotaped the encounters with their clinicians (N=36) prior to diagnostic testing. A study-specific coding scheme was used to code the audiotaped encounters and categorize communication behavior (e.g., 'Statements are made in which diagnostic testing or tests are explained/discussed: YES/NO'). In addition, the OPTION12-scale was used to assess the extent to which the clinicians involved patients in decision making regarding testing (range= 0 [no involvement] to 100 [high involvement]).

Findings: In 112/125 encounters, patients (mean age=70, SD=10; mean MMSE-score=25, SD=5) were accompanied by a caregiver. Mean duration of the pre-diagnostic testing encounter was 48 minutes (range 10-101). A reason for the encounter was voiced in 23/125 (18%) of the encounters, but was never related to diagnostic testing. Most often the reason was 'talking about complaints' (21/125). In 74/125 (59%) encounters, testing was addressed to some extent. Clinicians' behavior to involve patients in decision making regarding testing was low (mean OPTION12-score=16.6, SD=12.8). If a decision was made during the encounter (70/125), diagnostic testing was often presented by the clinician as the obvious next step (e.g., "I am proposing..."), and/or the decision related to testing in general (yes/no), rather than to decisions about specific tests.

Discussion: Results suggest that informing patients on (the available options for) diagnostic testing for (Alzheimer's) dementia is not routine in pre-diagnostic conversations. The decision to proceed diagnostic testing (or not) often seemed made prior to the encounter, potentially by the GP or fixed care path. If a decision was made during the encounter, this decision was often implicit, not related to specific tests, and with low levels of patient involvement. More research is needed to explore ways to improve patient involvement and assess their values and preferences related to diagnostic testing.


## O.32.3
## "What would you recommend doctor?" Discourse analysis of a pivotal moment in shared decision making.

**Fiona Wood, Cardiff University**
**Rebecca Sherlock, Cardiff University**
**Joanna Hyam, Cardiff University**

**Natalie Joseph-Williams, Cardiff University**
**Denitza Williams, Cardiff University**
**Adrian Edwards, Cardiff University**

Background – Proven benefits of Shared Decision Making (SDM) include improved patient knowledge, involvement and confidence in making decisions. SDM is widely advocated in policy but still not widely implemented in practice. A common patient-reported barrier is feeling that the "doctor knows best"; thus patients defer decision making to the clinician. SDM models have been developed, but few studies examine SDM by skilled practitioners in real-life consultations. By examining clinicians' responses to these "what would you recommend doctor?" questions, we aimed to provide practical guidance on how to avoid premature closure of SDM in these situations.

Methods – Discourse analysis was conducted on eight audio-recordings of breast cancer patient consultations in the 'MAGIC Study' in which patients attempted to defer treatment decisions to clinicians who were trained in SDM. All women were offered the decision between mastectomy and lumpectomy (local wide excision) with follow up radiotherapy.

Findings –Features of patients' talk indicated that they seemed aware that they should not be asking for the clinicians' opinion, that they felt the doctor knows best, and that they are uncomfortable making the decision. Clinicians responded by explaining why the decision was being shared (the personal nature of the decision, individual preferences, equal survival outcomes of treatment options) and assurance of time to make the decision. However, there was little evidence of clinicians eliciting patients' preferences, as recommended in SDM models. Despite asking for a clinician recommendation, all eight patients ultimately made their own decision.

Discussion – Our analysis highlights the difficulty for both doctors and patients in achieving a shared treatment decision, particularly when patients are anxious about expressing treatment preferences. That patients are seeking clinicians' recommendations does not necessarily indicate reluctance to engage with SDM. Practical strategies for clinicians to facilitate SDM when patients seem to defer decisional responsibility include being clear about why the decision is being shared, and then supporting patients to participate in SDM by exploring their priorities and preferences.

**O.32.4**
**Observing skilled shared decision making in routine clinical practice to derive a descriptive model for wider implementation**

**Natalie Joseph - Williams, Cardiff University**
**Denitza Williams, Cardiff University**
**Fiona Wood, Cardiff University**
**Amy Lloyd, Cardiff University**
**Kate Brain, Cardiff University**
**Adrian Edwards, Cardiff University**

Background:  Despite over 30 years of Shared Decision Making (SDM) research, more work is needed to understand how SDM unfolds in routine clinical settings, when undertaken by skilled and committed clinicians. This study aimed to examine SDM in two routine settings where SDM had been implemented, in order to: 1) describe the SDM process; 2) examine how the process compares to the 'Three Talk Model' of SDM, and 3) propose a descriptive model based on observed SDM.  With greater understanding of routine SDM, we will be able to better develop training and other interventions to promote wider routine implementation.

Methods:  A mixed-methods approach was used to examine the process of SDM during healthcare consultations. We recruited a purposive sample of patients considering treatment options from breast cancer and renal clinics in Cardiff and Vale University Health Board (UK). Consultations were audio-recorded and transcribed verbatim for thematic analysis and observer-OPTION5 scoring. Observed SDM was mapped to the 'Three Talk Model'.

Findings:  Seventy-six consultations were observed: 26 pre-dialysis patients, and 25 breast cancer patients (total of 50 consultations, diagnostic and follow-up per breast cancer patient).

OPTION5 scores indicated that SDM was performed across all consultations. Two of the three key stages of the 'Three Talk Model' were observed; 'choice talk' and 'option talk'. However, more elements and greater complexity were noted in our observations. Key additions / differences included: a distinct preparation phase; a highly tailored

and evolving integrative option conversation; patients' and clinicians' developing 'informed preferences'; distributed and multi-stage decisions; a more fluid and open-ended decision discussion (planning rather than decision talk), particularly for long-term conditions.

Discussion: When SDM is enacted by skilled clinicians in settings where it has been adopted and 'normalised', a different and more complex picture is observed from what is portrayed in current theoretical models. The degree of tailoring to individual needs, circumstances, and preferences was striking. The descriptive model presented represents this complexity, and may provide a basis for future training and implementation initiatives to promote SDM, and tackle the gap between what is advocated in policy, but rarely achieved in practice.

### O.32.5
### Shared decision-making in general practice; an observational study comparing 2007 with 2015

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Maartje Meijers, Nivel
Janneke Noordman, Nivel
Tim olde Hartman, Radboud University Medical Centre, Department of primary and Community Care

Background: Shared decision-making (SDM) is, largely, espoused as the preferred model for making decisions in everyday healthcare. Studies exploring the application of SDM in primary care practice are still lacking.

Objectives: This study explores how general practitioners (GPs) involve their patients in decision-making, to what extent this has increased over time (2007-2015), and what factors are associated with SDM.

Methods: We investigated the application of SDM by Dutch GPs by analysing a random set of real life videotaped consultations collected in 2007 (n=50) and 2015 (n=50). SDM was assessed by OPTION, a reliable and valid instrument measuring the extent clinicians involve patients in decision-making by coding 12 behavioural items. In addition, GPs and patients completed questionnaires about their background characteristics. We studied the differences in SDM between 2007 and 2015, and correlations between SDM and patient, GP, and the consultations' characteristics.

Results: In 2015, GPs applied SDM more often compared to 2007 according to OPTION. However, overall SDM scores were low. Consultation duration was significantly longer in 2015 than in 2007 and correlated, in both 2007 and 2015, significantly positive with the SDM scores.

Conclusions: The greater attention for SDM over the last decades is reflected in general practice, but there is still room for improvement. Longer consultations seem to increase SDM behaviour by GPs. However, SDM may be more important for some decisions than others and the intensity of SDM behaviour will always differ per patient and per context.

### O.33.1
### How can pharmacists develop patient-pharmacist communication skills? A realist review

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Caroline Kelleher, RCSI
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Background: Good patient-pharmacist communication improves health outcomes. There is, however, room for improving pharmacists' communication skills. These develop through complex interactions during undergraduate pharmacy education, practice-based learning and continuing professional development. Research is needed to determine how best to approach teaching patientpharmacist communication. This review asks what works for whom, how, and why for pharmacists to develop interpersonal pharmacist-patient communication? The aim of the research is to understand how educational interventions, to develop patient-pharmacist interpersonal communication skills, produce their effects.

Methods A realist review approach is being used to synthesise the literature to make sense of the complexities of educational interventions. Realist review methodology explores the link between context, mechanism and outcome. In our review we iteratively progress through the various stages of clarifying scope, locating existing theories, searching for evidence, appraisal of papers, data extraction and synthesis. A scoping review revealed a

number of substantive theories which, along with focus groups with students and staff, were used to develop initial programme theories. The initial programme theories are being tested and explored based on published literature retrieved from database searching. Judgements have been made on the relevance and rigour of the retrieved literature. Synthesis, testing and refinement of the initial theories will describe and explain links between contexts, mechanisms and outcomes of educational interventions for communication development in pharmacy.

Findings: Studies were heterogeneous with respect to rigour and the degree of relevance for exploring mechanisms. Initial findings suggest that experiential learning and practicing communication, such as with simulated patients, appear to work for students and pharmacists in various contexts. Initial mechanisms identifying how these interventions work include practice, repetition and contextualisation. These trigger reflective and increased confidence mechanisms which can improve communication skills.

Discussion: The review will provide an analysis of what works when, for whom, how, and why, for educational interventions for interpersonal patient-pharmacist communication development and potential barriers to successful communications training.  Ultimately, we plan to provide pharmacy educators globally with evidence for how best to incorporate educational interventions for communications skills development into pharmacy curricula in their context and for life-long learning opportunities for pharmacists.

### O.33.3
### Teaching interventions to develop patient-centredness in medical students: A Scoping Review

**Elize Archer, University of Stellenbosch**
**Ilse Meyer, University of Stellenbosch**

Background:  Patient-centredness has been identified by most medical schools world-wide as a desired core graduate competence. Patient-centredness positions the patient at the centre of the consultation and, therefore, focuses on the patient instead of on the disease. The concept of patient-centredness is, however, multifaceted. The choice and development of teaching and learning approaches and interventions that can enhance or sustain the various dimensions of patient-centredness, seems to be an ongoing challenge for undergraduate medical curriculum developers. The purpose of this study was to determine what the extent and nature of published scientific literature on implemented interventions are and how these could assist in fostering the various constructs of patient-centredness in undergraduate medical curricula. Furthermore, we wanted to determine which of these interventions could potentially be applied and incorporated in the context of an undergraduate medical curriculum in a resource constrained environment such as where the researchers are based at.

Methods:  The study followed the six-step scoping review methodology framework. Four electronic databases were searched and two independent reviewers screened citations for inclusion and then performed the data abstraction.

Results:  A total of 581 articles were eligible for inclusion in this study after the initial search, but after the processes of abstract reviews, full text reviews and duplication elimination only 58 articles were included in the final review. Information were captured in an Excel spreadsheet and resulted in nine categories of teaching interventions that could lead to the development of the various constructs of patient-centredness. These teaching methods/interventions include didactic sessions and workshops, simulated patients, reflection, small group discussions, e-learning, peer-roleplay/drama/surrogate, narratives/storytelling/art, clinical experiences and mindfulness.

Conclusion:  Communication skills training seems to be a large component of patient-centredness, however attention should also be given to other skills and attributes during undergraduate medical training. With regards to the teaching and learning strategies used it is clear that a multi-faceted approach is required to assist graduates to maintain their patient-centredness and foster it as a stronger competence.

### O.33.4
### Training sessions in clinical communication with a virtual patient

**Alexandre Berney, Lausanne University Hospital**
**Sandi Orsini, Lausanne University Hospital**
**Celine Bourquin, Lausanne University Hospital**
**Marianne Schmid Mast, Lausanne University Hospital**

Background: This teaching and research project aims to enhance and potentiate our current undergraduate communication teaching program in breaking bad news (BBN). Medical students can train the BBN task with a virtual patient before they have to conduct a videotaped interview with a simulated patient (SP). Students sit in front of a computer face-to-face with a virtual patient (VP). They respond to questions asked by the VP and their answers are videotaped for future visioning. They can train each question as many times as they want and also train a short interview.

Methods: The potential of the training with the VP was evaluated through experience feedback from medical students. Sixty-six medical students (Master level) participated in a 45-min individual training session and completed a questionnaire on practical and technical aspects of the program. Among these students, 13 who had already experienced the interview with a SP and 10 who were about to conduct their SP interview participated in separate focus group discussions addressing the use and benefits of the training and to what extent it responds to their training needs.

Findings: The analysis of the focus group discussions showed that the training with the VP can be effective to train technical aspects of clinical communication: e.g., structuring the information, being clear and coherent. Moreover, the videotaping of students' responses to the VPs allowed them to reflect on their attitude and to gain insight into their verbal and nonverbal behavior. However, the limited interactivity with the VP was viewed as hampering the training of relational aspects and, ultimately, the interpersonal connection.

Discussion: Training with VPs provides an interesting approach to train specific aspects of clinical communication in undergraduate medical education. Such approach may prepare to and potentiate the benefits of other forms of training (e.g. interaction with SP) in a more comprehensive training program.

## O.33.5
## Health literacy training for health professions students in geriatric, community-based settings

**Janice Knebl, University of North Texas Health Science Center**
**Erin Carlson, University of Texas at Arlington**
**Diane Hawley, Texas Christian University**
**Neika Nowamooz, University of North Texas Health Science Center**
**Jennifer Severance, University of North Texas Health Science Center**
**Subhada Prasad, University of North Texas Health Science Center**

Background: Nearly 60% of older adults have low health literacy. Communicating with older adults in a way that they can understand and act upon health education is particularly important to health outcomes. Health professions training curricula may be enhanced to equip future healthcare providers with health literacy skills for communicating with older adults. To achieve this, a medical school partnered with community organizations to create the Geriatric Workforce Enhancement Program in the state of Texas, United States, to deliver collaborative approaches for training.

Methods: Medical and health professions students (n=623) from local universities are grouped into interdisciplinary teams. Each team is paired with an older adult (n=44) who serves as the team's senior mentor. After receiving training on health literacy techniques, each student team presents a relevant health education message to the mentor in his/her home. Perceptions of participating students and senior mentors were assessed using a post-only, semi-structured Likert scale surveys. There was a 100% response rate among students and senior mentors.

Findings: Evaluation revealed 69% (n=427) of student respondents agreed that "I understand how to communicate with older adults using health literacy strategies" as a result of the training program. Further, 74% of student respondents agreed with the statement, "I am more confident about my knowledge of health care needs for older adults." Analysis of responses to open-ended survey items revealed themes of students' reported increased awareness of 1) considerations in caring for older adults; 2) how to refer patients to community resources; and 3) how to care for geriatric health issues. Among senior mentor responses, 98% (n=43) reported feeling better informed on a health topic due to the presentation received from the student teams, 98% (n=43) said they can apply what they learned from the student presentation to their health, and 35% (n=15) reported that, "a lot of change" occurred in how they take care of their health due to the student presentation.

Discussion: Innovative, interdisciplinary health literacy enhancements to existing medical and health professions education may increase future health care providers' knowledge, skills and confidence in communicating with older adults about health issues and community supports.

**O.34.1**
**Design and delivery of a three day residential Communication Skills Retreat**

**Megan Chiswell, Cancer Council Victoria**
**Peter Martin, Deakin University**

Background: In Australia an identified gap in the marketplace for an immersive experiential communication skills (CS) education program provided the opportunity to pilot a three day residential CS Retreat for clinicians. The CS retreat was a collaboration between an academic institution and a non-government organisation and aligned with both organisations strategic priorities to deliver education programs to support the provision of high quality person-centred healthcare. Utilising simulated patients (SP) and set in the cancer context, experiential learning extended across 4 time points from diagnosis to end of life.

Methods: The Retreat was hosted at a regional conference centre to allow clinicians to fully immerse themselves in experiential learning away from work. Education activity was designed to be learner-centred, and aligned with continuing professional development requirements of relevant professional bodies. The retreat was to be cost neutral for the organisations, with costs recouped through program fees. Partial scholarships and sponsored places were negotiated with health services.

The Retreat was bookended by large group plenaries. Three small groups, with a single facilitator and SP worked together in 8 sessions, across 4 time points for the remaining time. Session themes included breaking bad news, responding to emotions, discussing prognosis, shared decision making and goals of care.

Evaluation included pre and post participant questionnaires of self-reported confidence, knowledge and skills ratings in reference to various aspects of communication, and a telephone interview 6 months after the retreat to learn about application of learnings to clinical practice.

Findings: The Retreat attracted 19 participants from 10 disciplines. Participant self-reported ratings in confidence, knowledge and skills in CS increased. Assessment of skills in giving feedback to others and mentoring junior staff also improved. Descriptive feedback noted most useful elements as receiving feedback, the opportunity for repeat practise, and determining individual learning goals. Suggestions for improvements to the program included an additional SP scenario patient and more time for role play. A small financial contribution was required from the organisations.

Discussion: The Retreat was an effective approach to deliver immersive experiential education to clinicians. This program will continue, with more robust longitudinal evaluation of outcomes planned for future programs.

**O.34.2**
**Development and evaluation of an online communication skills training programme for oncology health care professionals working with patients from minority backgrounds.**

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**Rajneesh Kaur, Psychosocial Research Group, Prince of Wales Clinical School, the University of New South Wales (UNSW), Sydney**
**Bettina Meiser, Psychosocial Research Group, Prince of Wales Clinical School, the University of New South Wales (UNSW), Sydney**
**Elvira Zilliacus, Psychosocial Research Group, Prince of Wales Clinical School, the University of New South Wales (UNSW), Sydney**
**W.K. Tim Wong, School of Social Sciences, the University of New South Wales, Sydney (UNSW)**
**Lisa Woodland, South Eastern Sydney Local Health District**
**Kaaren Watts, Psychosocial Research Group, Prince of Wales Clinical School, the University of New South Wales (UNSW)**
**Sarah Tomkins, Cancer Institute**
**David Kissane, Department of Psychiatry, School of Clinical Sciences at Monash Health, Monash University**
**Afaf Girgis, Centre for Oncology Education and Research Translation, Ingham Institute for Applied Medical Research, South Western Sydney Clinical School, University of New South Wales, Sydney**
**Sandra Hale, Faculty of Arts and Social Sciences, University of New South Wales, Sydney**
**Astrid Perry, Multicultural Health Service, South Eastern Sydney Local Health District, Sydney**
**Sanchia K Aranda, Cancer Council Australia**
**Tim Shaw, Charles Perkins Centre, Faculty of Health Sciences, University of Sydney**
**Helen Tebble, School of Languages, Literatures, Cultures & Linguistics, Monash University**

**David Goldstein, Prince of Wales Clinical School and Nelune Cancer Centre, Prince of Wales Hospital**

Background:  Patients from minority backgrounds have poorer cancer outcomes including lower survival rates, higher rates of reported side-effects and poorer patient quality of life. These disparities may arise because of language and communication barriers, culturally divergent beliefs and attitudes about cancer and treatment, range of service/systems barriers such as lack of culturally competent health care providers and/or lack of familiarity with healthcare processes. This study aimed to develop and assess the feasibility of an online communication skills training (CST) intervention to increase cultural competence amongst oncology healthcare professionals working with individuals from minority backgrounds

Methods: An online CST program providing strategies exemplified in vignettes-based professionally produced videos was developed through an iterative process with input from a large multidisciplinary team. The CST program was tested with oncology healthcare professionals. Participants were asked to complete self-report questionnaires at three time points-pre-CST program (baseline) and post-CST program, (a) two weeks after completion and (b) three months later.

Findings: Fifty-three oncology healthcare professionals completed all three questionnaires. The online intervention was well received by the majority of participants, and 87% reported increased confidence in communicating with patients via an interpreter, and 93% agreed that skills gained would be useful in providing better patient care. Participants reported significant improvements in practice while interacting with people with limited English proficiency two weeks and three months after accessing the website (X2=13.66, P<0.001). The online programme was considered to be clearly presented, informative, relevant and useful by more than 90% of participants.

Discussion: The programme was considered highly satisfactory and participants reported increases in self-rated competence while communicating with patients from minority backgrounds after having used the programme. The findings of our study demonstrate that after completion of the online programme, health professionals were more likely to think that they and hospitals should adapt to the needs of patients from minority backgrounds. This online programme provides an opportunity for health professionals to understand the issues and potential strategies required to improve communication with minority patients.Abstracts

## O.34.3
## Quality of Nurse-patient-interaction and Rehabilitation outcomes: Do they relate?

**Susanne Gisela Dibbelt, Institute for Research in Rehabilitation Norderney (IfR)**
**Edith Wulfert, Institute for Research in Rehabilitation Norderney (IfR)**
**Bernhard Greitemann, Institute for Research in Rehabilitation Norderney (IfR)**

Background. Nurses are usually educated to work in acute care hospitals and are therefore less prepared for communicative and educational duties required in rehabilitation (Hotze, 1997; Hotze & Winter, 2000).

The goal of this study was to develop a communication skills training for nurses that meets the specific needs in rehabilitation centers. Additionally, we evaluated the effect of the training on the quality of interaction.

Methods. During a two day in-house training nurses were trained in basic conversational skills as well as in dealing with challenging situations (e.g. complaints, psychological problems or non-compliance).

In six participating rehabilitation centers 44 nurses and patients rated the quality of their admission interviews before and after training with the Conversation Rating Questionnaire (CRQ; Dibbelt et al., 2014). The CRQ consists of 22 items, which describe (nurses) behavior and affective aspects of the interaction. A patient and nurses version was used.

Scores of positively worded items were aggregated to an index of communication promotors and negatively worded items to an index of communication disturbers. Wilcoxontests for dependent samples were performed to compare the means of indexes in the baseline (before) and in the intervention group (after training). N=637 cases were included in the baseline and N=428 cases in the intervention group.

Results. The nurses' ratings of the communication promotors in their admission interviews tend to be higher after training, whereas the ratings of communication disturbers tend to decrease.

On the contrary, the patients' ratings of the communication promotors tend to decrease in the group after training, whereas ratings of communication disturber increased. However, none of these differences were statistically significant, neither for the entire sample nor for single rehab centers.

Discussion. Ceiling effects might be the reason why increased ratings in the intervention group did not reach statistical significance (nurses). The nurses and patients knew that their interaction would be rated afterwards. This probably improved communication behavior in the baseline. Methods to control this "checklist-effect" will be discussed during the presentation.

### O.34.4
### The impact of a communication skills workshop on Middle Eastern doctors' behavior over time

**Carma Bylund, University Of Florida**
**Kelsy-Ann Adams, University Of Florida**
**Ambika Anand, Hamad Medical Corporation**
**Tripiti Sinha, Hamad Medical Corporation**
**Abdelhamid Afana, Hamad Medical Corporation**
**Mohamed Yassin, Hamad Medical Corporation**
**Ahmed El Geziry, Hamad Medical Corporation**
**Awais Nauman, Hamad Medical Corporation**
**Sheyma Al-Romaihi, Hamad Medical Corporation**

Background:  Communication skills education is still relatively new in some non-Western countries. Further, most evaluation research on communication skills education examines only short-term impact. In our communication skills program in an Arabian Gulf country, we took an innovative approach, assessing how the course impacted participants' knowledge, attitudes and behavior over time. Our research questions were: RQ1: What is the impact of the communication skills course on participant outcomes? RQ2: Is the length of time since course completion associated with participant outcomes? RQ3: Is participant gender or clinical position associated with participant outcomes?

Methods:  738 physicians completed a seven-module communication skills course. Participants reflected on what they learned in the course and how the course had impacted their behavior through a nine-item online survey that included a 4-item Communication Workshop Impact Scale (CWIS), three open questions, and two demographic questions. To assess the effect of time since workshop on outcomes, we stratified the respondents into five groups based on how long ago they had completed the course.

Findings:  332 physicians completed the survey. RQ1: Participants reported high scores on the CWIS: $X$=4.45 ($SD$=.70). When asked which skill(s) they had been able to implement in their clinical practice, 235 gave a specific response, either a specific communication skill (e.g., ask open questions), a higher-order category of skills (e.g., questioning skills), or the name of one of the seven modules of the course. Only 28 participants listed the name of a skill or module name that they had not been able to implement. RQ2: There was no evidence of difference on CWIS score based on time since course completion. RQ3: There was no gender difference; however, residents had significantly lower CWIS scores than fellows (4.70 v. 4.29, $p$<.05).

Discussion:  Participants reported high impact of the course on their knowledge, beliefs, and attitudes. Furthermore, most physicians were able to name something specific that they had learned from the course and were currently implementing in their practice. Positive outcomes of the course did not seem to diminish over time. Future research should identify whether observable communication behavior matches the self-reported behavior.

### O.34.5
### Training health professionals to engage in behaviour change talk with patients

**Sarah Peters, University Of Manchester**
**Lucie Byrne-Davis, University Of Manchester**
**Jane Beenstock, Lancashire Care NHS Foundation Trust**
**Suzanne Gilman, Lancashire Care NHS Foundation Trust**
**Anna Chisholm, University of LIverpool**
**Joanne Hart, University Of Manchester**

Background:  Health professionals have an important potential role to support patients to change health-related behaviours. A barrier to initiating these conversations is worry about knowing what techniques can work to effect change. Training is needed to equip staff with skills in facilitating behaviour change. The aim of the study was to

develop theory and evidence-informed training and evaluate the uptake, acceptability and impact on behavioural determinants and expectations.

Methods: A prospective pre and post-training questionnaire study. A 90-minute interactive online training module was developed, informed by health psychology theory and evidence. All staff in a large mental health and community NHS trust were invited to take part as part of Making Every Contact Count training for UK NHS staff. Questionnaire items included the number of behaviour change conversations they had had with service users in the preceding week, behavioural determinants and behavioural expectations regarding providing behaviour change support.

Findings: Of 482 staff who completed the module 228 (47%) completed pre- and post-training surveys and were included in the analysis. Eleven clinical and non-clinical professional cadres accessed the online module. Mean age was 42 years (S.D.=9.2); most were female (89%) and worked in adult community settings (60%). Participants reported engaging in between zero and 100 behaviour change conversations per week (66% <4 conversations per week). Nine of the ten behavioural determinants significantly increased post-training.

Discussion: Behaviour change science can be translated into useful online learning resources for health professionals that they will engage with. Those that undertake training increase their likeliness to have behaviour change conversations with patients, and this is associated with improvements in key theory-linked determinants of behaviour.

# Symposia

**S.10**
**Patient-Centered Communication for Surgeons and Procedural Specialists: A Call to Action and Strategies for Success in Teaching Nontechnical Skills**

**Kathleen Kieran, Seattle Children's Hospital**
**Muneera Kapadia, University of Iowa**
**Matthew Russell, Veteran's Administration Medical Center**
**Sally Fortner, University of New Mexico**

Surgery residency programs rarely utilize dedicated techniques to teach and learn nontechnical skills, and surgical residents have lower Press-Ganey scores than nonsurgical residents. These findings underscore the need for surgeons to hone non-technical as well as technical skills. This symposium will identify specific communication skills are needed by surgeons interacting with patients, families, and other providers, as well as opportunities and strategies for teaching communication skills in clinic, procedural, and consultative settings to surgeons at all experience levels.

Presenter 1 will introduce the symposium and the other presenters. Her presentation will focus on why communication skills are important for surgeons and how communication skills are different for surgeons compared with nonsurgeons. She will discuss the current state of communication skills teaching in various surgical subspecialties as well as contemporary research on communication in surgical subspecialties, in particular the relationship between surgeons' nontechnical skills and clinical- and patient-reported outcomes.

Presenter 2 will identify opportunities and strategies to teach nontechnical skills to surgeons of all experience levels in the clinic, operative, and consultative settings. In particular, she will discuss teaching opportunities during work rounds, surgical procedures, postoperative conversations with families, clinic (including clinic-based procedures), and day-of-surgery visits. She will discuss the differential skills needed in each of these settings and provide strategies to engage learners in the different environments with respect and professionalism. (15 minutes)

Presenter 3 will focus on interpersonal skills needed during conversations with consulting services (e.g. internal medicine, the emergency room), during family meetings, and when speaking to the families, loved ones, and caregivers of the surgical patient. His presentation will focus on the skills needed to maintain a patient-centered approach even when the patient is not directly included in the conversation, and will include skills needed for difficult/challenging conversations with families and patients. (15 minutes)

Presenter 4 will discuss how to give feedback to learners in various clinical settings, with particular focus on strategies to give meaningful real-time feedback during procedures. Her presentation will center on identifying the learner's goals in procedural settings, while also incorporating the goals of the patient, family, and preceptor, and acknowledging the challenges inherent to procedures in which the patient is awake and/or family members are present. (15 minutes)

Presenter 1 is an associate professor of urology and a pediatric urologist. She is currently a Facilitator-in-Training at ACH and has intramural funding to study differences in surgical conversations with and without interpreters. She has published on the current state of communication skills teaching in urology and has developed and implemented a curriculum to teach communication skills to urology residents and has also directed several workshops and national courses on communication skills.

Presenter 2 is an associate professor of surgery, associate program director for the general surgery residency, and a colorectal surgeon. She has multiple publications on resident education and has been invited to teach communication skills to surgeons both in her home country and abroad.

Presenter 3 is a geriatrician at the Veterans Affairs Hospital and an ACH Faculty Member. He has a special interest in palliative care and has developed curricula to teach difficult conversations with medical and physician assistant students and has been an invited speaker at multiple institutions nationally.

Presenter 4 is an anesthesiologist, professor of anesthesiology, and program director for internal medicine. She is ACH faculty and has worked in simulation for over a decade. She is an instructor in the resident curriculum and specializes in simulation for communication training. She is the Director of Professional Development for the School of Medicine and works with students to improve their communication and clinical reasoning skills for Objective Standardized Clinical Exams.

**S.11**
**Using Twitter and other social media to promote your work as a researcher**

**Mara Van Beusekom, University of St. Andrews, Scotland**
**Anne Moorhead, Ulster University**
**Marij Hillen, Academic Medical Center, Amsterdam**
**Pål Gulbrandsen, University of Oslo**

Researchers are expected to promote their research and one of the increasing methods is using social media. Social media can additionally be used for recruitment, networking and staying up-to-date with the literature. However, many researchers consider themselves to be unequipped to use social media for their work or fear it may cost them too much time or effort.

This interactive symposium, organized by the research committee of EACH, is a comprehensible 'how to'-guide for social media use, highlighting Twitter as a practical example. It is intended for researchers who have limited experience with and are interested in increasing their use of social media, and Twitter in particular. In three interactive presentations using discussions, examples and exercises, we will demonstrate how to promote your research through social media, and show the many other relevant ways in which social media might benefit your research practice.

Presentation 1 will include how to establish a professional network and compose appealing brief messages to promote research. In an interactive exercise, participants will have the opportunity to practice their Twitter skills by translating a research article into tweets for different target audiences.

Presentation 2 will demonstrate the many other ways in which social media can be used to promote research. Examples are recruitment of research participants or job candidates, keeping up-to-date with the latest scientific and non-scientific research and networking with other researchers.

Finally, in presentation 3, a researcher with extensive experience in using social media will share his tips and tricks on how to combine social media use with a busy research career. He will moreover discuss his personal considerations in deciding which social media channels to use for what.

The outcome of this symposium will provide you with the skills and motivation to maximize your use of social media, and particularly Twitter, for your research.

# Workshops

## W.16
## Experiencing Balint groups: a training tool

**Alice Polomeni, Société Médicale Balint**
**Jorge Brandao, Associação Portuguesa de Medicina Geral e Familiar**

Rationale: Balint groups are a framework to help healthcare professionals (HCPs) to reflect on their own attitudes, limits and difficulties in their daily practice care-relationships. Research has suggested that Balint groups contribute to preserve empathy in medical students, to reduce burn out in oncology residents and to manage the stresses, isolation and intense feelings raised by HCPs-patients relationships.

Sensitizing HCPs to this approach is very important, because Balint groups may be a precious tool in HCPs training.

Learning Objectives: The learning objective is that participants could – through their own experience - understand the objectives and the methodology of Balint groups. Indeed, what is put at work in these « training-research groups » is the clinical experience. Reflecting on the complexity of care relationships may enlight communication difficulties, even to HCPs who have been through communication skills training. The Balint group constitutes a setting to HCP to exercise their abilities of listening and understanding the patients' experience, and contributing to self-reflective practice. Balint groups' framework can be declined within different settings – from the initial training to the training of seasoned HCP.

Practice Implications: Methods: Participants and leaders take place in a circle, without tables. In the first five minutes, the leaders themselves and In explain the Balint group settings : confidentiality, spontaneous exchanges, non-judgmental remarks, relational issues centred discussions. The leaders are not « experts » : their function is to insure an «atmosphere » enabling each one to express him/herself and to exchange about the relational issues of a clinical case.

The group work will work on a participant's case report trying to help him/her to better understand his/her relationship with this patient. The case will arouse various interpretations, revealing the part of the subjectivity present in the way each group member performs the care function. The ten last minutes will be dedicated to a debriefing with the participants, in order to clarify the Balint groups' framework.

Evaluation: The evaluation will take place in two times : firstly, a debriefing inviting participants to discuss about the setting ; secondly, an individual evaluation, based on a written support.


## W.17
## Great White Shark Swims Nearby! Communication in Trouble: Patients with "PERSONALITY DISORDERS" in your practice

**Shakaib Rehman, Phoenix VA Healthcare Systems/University of Arizona**
**Elizabete Loureiro, University of Porto**
**Monica Broome, University of Miami**
**Rob Lane, University of Leeds**

Rationale: In many healthcare settings, patients with Personality Disorders (PD) cause frustration/dissatisfaction for clinicians because of frequent consultations for physical symptoms without a clear diagnosis and many instances of self-harm, harm to others or challenging doctor-patient relationships. PD often complicate the diagnosis/management/outcome of co-occurring medical and psychiatric conditions such as anxiety/depression/substance abuse etc. Communications skills used in general population may not work on patients with PD and may even cause more problems for clinician.

Plus, patients with PDs are often mishandled in medical practice, because of a lack of knowledge and a generally "negative" attitude that can be evoked in their doctors. Clinicians' encounters with patients with PD may be longer and unproductive. This is understandable, as PDs patients often have difficult-to-manage behavior such as excessive dependence on others, repeated complaints, problems in sustaining relationships and difficulties in many aspects of social functioning. This workshop will discuss how to empathically identify and manage patients with PD with emphasis on specific communication techniques and skills required to effectively deal with such patient population.

Objectives

- Discuss and practice communication skills needed while taking care of patients with personality disorders (PD).
- Learn skills to make encounter more productive/satisfying/efficient.
- Explore when consultation/referral is most likely to be helpful.

Teaching Methods

10 min    Large group interactive session using faculty role play and flip charts to identify the difficulties and challenges faced by clinician regarding the mangement of personality disorders.

5 min    Literature Review/tools.

10 min    Small Group breakout session: Discussion in groups of 3-5 about personal experiences and what was done (Good or bad).

5 min    Presentation of Cases/video.

5 min    Share-Pairs/Case-Based.

15 min    Small group session: Using cases participants will devise the strategies.

30 min    Large group interactive session. The audience will complete several exercises to enhance their skills to cope with patients with PD.

Evaluation (10 mins)

- Pre-and-posttest.
- Reflection: tool/activity learned/enjoyed/try for a specific task.
- Evaluation form for satisfaction with content/delivery of session.


Teaching Materials

- Handout/Questionnaire/Worksheets
- Slides
- Film clips
- Writing prompts/Facilitation guides
- Bibliography


**W.18**
**What really matters to patients? Using research to help teach goal-setting in practice.**

**Charlotte Salter, Norwich Medical School, University of East Anglia**
**Sandra Winterburn, Norwich Medical School, University of East Anglia**
**Elizabeth Lenaghan, Norwich Medical School, University of East Anglia**
**Alice Shiner, Norwich Medical School, University of East Anglia**
**Nicholas Steel, Norwich Medical School, University of East Anglia**

Rationale:  Modern healthcare tends to be driven by clinical guidelines and targets rather than patients' priorities. For patients with multiple long-term conditions this can lead to over-diagnosis, polypharmacy, and impair patient motivation and ability to self-manage. Focusing on patients' individual priorities and goals through effective communication may improve outcomes for patients.

As part of the recent GoalPlan Study the authors developed a training package. The aim was to encourage the use of the specific communication skills required to identify patient priorities and set individualised goals. Using findings from the GoalPlan Study we will use real-world examples of patients setting goals with family doctors. This

workshop will explore the essence of goal-setting and identify with participants the necessary steps for patients and practitioners to engage in this important task.

Learning Objectives:  By the end of this workshop participants will be able to:

- describe key elements of goal-setting

- discuss goal-setting in the context of shared decision making (SDM)

- **recognise the main challenges and rewards of working with patients' own goals**

- describe specific skills that can be incorporated into teaching practice to enable clinicians to adopt goal-setting into everyday practice

Teaching methods/activities:  Workshop will be interactive and use experiential methods supported by theory and evidence, including both real-world video clips and transcripts of doctor-patient interactions. It will involve group work to skill-spot and role-play, enabling exploration and rehearsal of specific skills involved in goal-setting.

**09.00 Brief introduction of facilitators and objectives. Participants to set own 'goals' for workshop and share.**

09.10 Working definition of goal-setting will be offered. Small group work on two questions & feedback.

Where does goal-setting fit with SDM?

What are the benefits and challenges of goal-setting?

09.25 Illustrate benefits and challenges to goal-setting through authentic video clips.

09.45 Relate group workshop findings to findings of GoalPlan study. Short didactic presentation.

**09.55 'Turning a patient's priority into a goal'. Experiential role**-play using key skills in groups of 3. Feedback.

10.20 Evaluation

10.30 End

Evaluation of outcomes:  Written evaluation of changes to teaching and/or practice incorporating ratings scales. Findings will be collated and circulated.

# Works in Progress Oral Presentations

**WIP.3.1**
**Analysis of explanation and planning skills in pre-operative conversations using the EPSCALE**

**Heather Schopper, University Of Iowa**
**Marcy Rosenbaum, University Of Iowa**
**Muneera Kapadia, University Of Iowa**

Presenter's early career status: Final year medical student

Background: Pre-operative conversations are an important opportunity for physicians to help patients understand their upcoming procedures and plan for the post-operative period. These conversations can easily become a lecture, with a unidirectional transfer of information at the cost of patient engagement. The EPSCALE, a validated instrument that measures explanation and planning skills, can be used to examine the vital communication skills used in the pre-operative setting.

Methods: 21 pre-operative visits with surgeons were audio-recorded at a single US academic medical center. The recordings were analyzed for shared decision making and surgical planning skills using the EPSCALE.

Preliminary findings: The average score across all subcategories was 1.67 on a scale of 0-3, with scores ranging from 0.92-2.46. Higher scoring pre-op conversations tended to have specific characteristics including an opening inquiry into patient understanding of the procedure at hand, frank and detail comparison of treatment options, and/or actively engaged patients with lots of questions. Several encounters did not give patients the opportunity to express their feelings about their upcoming procedure and therefore precluded physicians from showing empathy; these encounters represented three of the four lowest scoring events. There was no significant correlation between average EPSCALE score and length of encounter ($R^2$ = 0.122, p = 0.12).

Preliminary implications of research: While pre-operative consultations require the transfer of a great amount of information, the overall encounter proceeds better when the skills outlined in the EPSCALE are utilized. Conversations that did not give patients the opportunity to express their feelings tended to do poorly overall, highlighting the need to actively use the patient perspective to guide the flow of the conversation. The lack of correlation with time shows that good explanation and planning skills can be used independent of time concerns.

Request for feedback: The presenter would like feedback on the validity of using the EPSCALE (or other assessment tool) in a specialized encounter like a pre-operative conversation as well as ideas for strategies to suggest to physicians to help them better balance information giving and patient primacy.

**WIP.3.2**
**Efficacy of mindfulness and self-compassion strategies in the regulation of self-conscious emotions and prosocial behaviors**

**Carla Andrade, CIS/ISCTE-IUL**
**Patrícia Arriaga, CIS/ISCTE-IUL**
**Marina Carvalho, CIP/ISMAT**

Few experimental studies support the hypothesis that the induction of mindfulness or selfcompassion allows immediate and effective emotional regulation.

This hypothesis has never been tested by comparing strategies of mindfulness, self-compassion or distraction in the regulation of guilt and shame, as well as the subsequent impact on trust and help. Two pilot studies with an experimental design will be performed at the beginning of the research, the first one with the intention of testing and selecting the most appropriate procedures and measures (self-report and psychophysiological measures) to induce and evaluate the self-conscious emotions; the second to induce and evaluate the strategies of emotional regulation, analyzing also possible moderating variables.

Subsequently the study of the effectiveness of the strategies of mindfulness, self-compassion or distraction in the regulation of self-conscious emotions and prosocial behaviors will have an experimental design. All studies will be constituted by samples of graduate students or general population, recruited with non-probability sampling method (convenience sampling) and the results will be analyzed with quantitative methods.

Currently, we are finishing the recruitment of the first pilot study and preparing the data analysis. We validated the Portuguese version of the State Mindfulness Scale, and the results showed appropriated psychometric characteristics in mindfulness practitioners or naïve population. It is hoped that the results can reinforce the use and teaching of strategies of mindfulness and selfcompassion as specific skills in the regulation of these self-conscious emotions, with positive impact on social behaviors. This can assume a particular relevance in vulnerable contexts and populations as in the healthcare fields.

I would like to receive feedback about other measures and procedures to assess emotions, emotion regulation strategies and prosocial behaviors; as well as other possible moderating variables in emotion regulation; and, the feedback on how this research project could serve better the needs in the emotion regulation field in the healthcare context and communication.

This feedback will help to better frame the variables, measures and procedures in the next studies, as well as improve some aims to better answer the needs in the clinical and healthcare area.

## WIP.3.3
## How do GPs raise psychosomatic attributions in consultations about unexplained symptoms?

**Inge Stortenbeker, Radboud University**
**Wyke Stommel, Radboud University**
**Sandra van Dulmen, Radboud University Medical Centre**
**Tim olde Hartman, Radboud University Medical Centre**
**Enny Das, Radboud University**

Presenter: The presenter is a PhD student at the Centre for Language Studies (CLS) at Radboud University (RU) Nijmegen (NL) since September 2017. Her project focuses on language used in general practice consultations about medically unexplained symptoms. The project is funded by the Netherlands Organization for Scientific Research for PhDs in the Humanities.

Background: General practice consultations about medically unexplained symptoms (MUS) tend to be perceived as difficult and unsatisfactory interactions. Symptoms are often attributed to psychosocial factors such as experienced stress, but previous research showed that some patients react defensively to these so-called psychosomatic attributions. Discussing these attributions may be perceived as a face-threatening activity that stigmatizes patients as malingerers or having emotional problems. Yet, no research has yet focused on the ways in which general practitioners (GPs) use to raise psychosomatic attributions. Based on what we know about interaction, different ways of topicalizing psychosomatic explanations may elicit different patient responses. Therefore, the primary goal of this study is to analyze how GPs raise psychosomatic attributions in consultations with patients with MUS.

Methods: Video-recordings of 35 Dutch general practice consultations concerned with medically unexplained symptoms are transcribed and analyzed using conversation analysis. We characterize different ways of raising psychosomatic attributions and evaluate the kinds of responses they elicit.

Preliminary implications: The eventual aim of this project is to gain insights in the relation between the interaction about psychosomatic explanations in consultations concerned with MUS and medically relevant outcomes. By implication, this study will yield knowledge of communication about MUS relevant to the development of GP training.

Request for feedback: We would appreciate feedback on our analyses of the data presented.

## WIP.3.4
## How eye contact may affect trust between patient and physician – exploring novel methods

**C. Jongerius, Academic Medical Center**
**M.A. Hillen, Academic Medical Center**
**E.M.A. Smets, Academic Medical Center**
**J.A. Romijn, Academic Medical Center**

Background: Eye contact is one of the most salient aspects of non-verbal communication between doctors and patients. The use of complex Electronic Medical Records (EMR) may reduce eye contact. This is problematic, as

reduced eye contact may hinder rapport building between patient and physician, for example by reducing patients' trust levels. However, validity of previous findings on the impact of EMR on eye contact and trust is limited by imprecise measures of eye contact. Novel eye-tracking techniques offer an advanced approach to study eye contact. Our aim is to understand whether, as hypothesized, a higher degree of eye contact is associated with better patient reported quality of the relationship between the doctor, who uses an EMR, and the patient. Additionally, the potential mediating role of physicians' responses to patients' emotional cues and concerns is considered.

Methods:   We test this through an observational survey design in a outpatient clinic in the Netherlands. Resident physicians use eye tracking glasses while conducting consultations, which are video recorded. Questionnaires are administered before and after the consultation to physicians and patients, assessing background characteristics and outcomes. Artificially intelligent vision engineering techniques are used to analyse the level of eye contact. Physicians' responses to patients' cues and concerns are coded using the VR-CoDES.

Preliminary implications of research:  Results advance evidence on the implication of EMR use for keeping eye contact with the patient and the consequences thereof for the quality of the doctor-patient relationship. Results also have implications for eye tracking as a reliable method to identify levels of eye contact in clinical encounters.

Request for feedback:

Issue 1: Throughout consultations the physicians make eye contact also with the caregivers of the patients. How to take the role of the caregiver into account is open for discussion.

Issue 2: How the physician's responses to emotional cues and concerns and eye contact are linked is still unclear. Suggestions are requested on how these elements can be related to each other and to patient reported outcome measures.


## WIP.3.5
## Mental health student nurse (MHSN) communication; responding to emotion, patient and student nurse satisfaction

**Paula Carroll, Edge Hill University**
**Peter Leadbetter, Edge Hill University**
**Jeremy Brown, Edge Hill University**
**Sally Spencer, Edge Hill University**

Good communication in healthcare settings has a positive impact on health outcomes (Neumann et al, 2009) and patient satisfaction (Del Piccolo et al, 2012); this has particular importance in mental health services where complaints are highest (CQC, 2017). People with mental health problems may experience difficulties communicating their emotions (Priebe et al, 2011) thus nurses need to be able to recognise and help patients express such emotions and respond effectively. It follows that it is imperative that nursing students receive effective teaching and quality learning experiences which develop their communication skills

There are limited studies in mental health settings that have examined the relationship between emotional responses in healthcare consultations and links with patient satisfaction and there are few that include inpatients and nurses or nursing students (Zimmerman et al, 2011). Furthermore, the published studies have methodology inconsistencies and employ an array of measurement tools making comparison difficult (Zimmerman et al, 2011). As such further research is needed in this area using a consensus coding system (Verona Coding Definitions of Emotional Sequences (VRCoDES)) to quantify emotional responses.

The primary aim of this study is to explore how MHSN respond to emotion in both classroom and clinical placement settings. A secondary aim is to explore how these responses influence patient and student nurse satisfaction of the consultation.

Methods:  Second and third year MHSN's will participate in Observed Structured Video Examinations (OSVE), following which their verbatim responses to the emotional cue and concerns presented will be coded using the VR-CoDES (Completed April 2018)

MHNS's will also be videotaped during patient consultations in second year and third year clinical placements. These videos will be coded using VR-CoDES to assess MHNS emotional responses to patients' cues and concerns. Questionnaires will be completed to assess patient and MHSN satisfaction of the consultation (Completed currently being analysed)

Analysis will look at relationships between relevant factors. This research will inform teaching and assessment of nursing and other health care professionals. Suggestions and recommendations on how to analyse and present data for pending VIVA and publications is encouraged.

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## WIP.3.6
## Professional-patient communication in oncology: expression of the emotional concerns of patients in medical consultations

**Fernanda Romeiro, University of Vale of Sinos**
**Elisa Kern de Castro**
**Margarida Figueiredo-Braga, University of Vale of Sinos**

In oncology, the communication of professionals is seen as one of the main instruments of care provision. In general, the quality of professional-patient interaction is associated with an assertive communication that may impact on better treatment outcomes, patient satisfaction, well-being, and quality of life. Emotion, although often present in cancer patients, is rarely demonstrated directly and spontaneously in the consultation. The expression of negative emotions may reflect the distress of patients and the concerns related to their illness, requiring attention and management of the health professional. This study aims to examine how emotional concerns are expressed by adult cancer patients and answered by health professionals in medical consultations. In addition, the study also aims to describe a sequence of health professionals' responses to the emotional expressions of these patients, to identify how they are associated with treatment satisfaction, and to relate the emotional concerns to the sociodemographic and clinical variables of the patients. It is a mixed study, both descriptive and exploratory. The participants of the study will be adult patients in treatment for cancer of any kind and doctors of different specialties such as: oncologists; radiologists; hematologists; surgeons, among others who attend these patients. It is estimated the participation of approximately 10 patients and their respective physicians, totaling an average of 10 consultations. Instruments: a) Sociodemographic and clinical data for patients; b) Sociodemographic and labor data for health professionals; c)

Satisfaction Questionnaire: adapted from Patients Satisfaction with the Interview Assessment Questionnaire (PSIAQ) (Delvaux et al. 2004) portuguese version (Figueiredo-Braga & Braga); d) Communication Assessment Tool (IAC): Communication Assessment Tool (CAT) - (2004/2012) - Gregory Makoul, PhD - translation in portugal (Carvalho & Figueiredo-Braga); and e) VR-CoDES: Verona Coding Definitions of Emotional Sequences (Del Piccolo et al., 2011), translated into the portuguese version (Pais & Figueiredo-Braga, 2017). With this study, it is expected that the emotional concerns expressed by patients on cancer treatments may guide the practices of health professionals in relation to assertive communication in the context of oncology.

# Parallel Session 7

## Oral Presentations

### O.35.1
**Cancer patients' evaluation of psychosocial care after insufficient communicated changes in health care policy**

**Adriaan Visser, Pro-health.org**
**Anne Vennix, De Vruchtenburg**
**Margot Van der Doef, Leiden University**

Background: The Dutch health care insurance companies and the governmentally national health care legislation did restrict the offer of counseling for cancer patients and raised as well the fees for the counseling. So, the conditions concerning the financial cost for the patients became higher for less counseling in 2014-2015. These changes were often not well communicated to the therapeutical centres and their clients. In a study about the perceived and communicated effects of these changes were explored concerning the inflow of clients and their treatment evaluation.

Method: The data was based on the yearly answered questionnaires at a big cancer centre, filled in after finishing the therapy by the clients. For this purpose, two groups of clients were formatted based on the occurring health insurance and legislation changes: clients receiving psycho-oncological care and filling in questionnaires in 2012/2013 (N=334) and clients from 2014/2015 (N=360). Analysing of the differences between both groups concerning inflow and evaluation, the differences in background characteristics were taken in account by using multivariate tests.

Findings: The results show that in 2014/2015 in comparison with 2012/2013 the clients were more often women, were more often a relative, were older, were longer diagnosed with cancer, and had more often received an unknown cancer prognosis. Also differences in the evaluation of the care were found on two treatment aspects. Clients in 2014/2015 were more complaining about the information provided about the therapy, their active participation by choosing a therapy, and about the counsellors itself, e.g. their trustworthiness. Almost identical results were found for the three most commonly followed therapies separately: individual counseling, cognitive behavioural therapy, and art therapy.

Discussion: The results indicate that the insufficient communication about the changes in the health care insurance as well as the national legislation of care conditions did harm the psychosocial counseling of cancer patients. The psycho-oncological care became less easily accessible and more negatively evaluated for some groups of clients. These effects might be caused by the changes in health insurance and legislation. Restrictions about the design, the subjective data, changes of therapists, and illness states of the clients will be discussed.

Margot van der Doef, PhD, doef@fsw.leidenuniv.nl; Leiden University Leiden, NL

### O.35.2
**Counselors' views on key aspects of counseling for prenatal anomaly screening and a 'good' client-decision**

**Linda Martin, Midwifery Science, AVAG, Amsterdam Public Health research institute, VU University Medical Center**
**Janneke Gitsels-van der Wal, Midwifery Science, AVAG, Amsterdam Public Health research institute, VU University Medical Center**
**Lidewij Henneman, Department of Clinical Genetics, section Community Genetics, Amsterdam Public Health research institute**

Background: In the literature, prenatal counseling for congenital anomaly screening is conceptualized as comprising both Health Education and Decision-Making Support (e.g. value-clarification) aiming to facilitate a deliberate, informed choice. Building and maintaining a client-counselor relation is a necessary condition for enabling these two counseling functions. In daily practice, prenatal counseling consists mainly of providing Health Education. Relatively little is known about counselors' views on key aspects of counseling and their views about a 'good' client-decision whether to opt for anomaly screening. We assume that insight in counselors' views on key

aspects of counseling and a 'good' client-decision is fundamental for interventions aiming to optimize counseling in practice. We undertook the current study to explore them both.

Methods: In February 2017, an online cross-sectional survey was sent to all ~3000 Dutch prenatal counselors, most being midwives. The questionnaire contained both closed and open-ended questions. In total, 1568 (52%) counselors completed the questionnaire. Based on the functions of counseling (Health Education and Decision-Making Support) and the definition of informed choice we coded and labeled the open answers to allow statistical analysis. We performed descriptive statistics to explore counselors' views on key aspects of counseling and a 'good' client-decision.

Findings: According to three-fourths of the counselors (N=1187; 74%), Health Education is a key aspect of prenatal counseling. Health Education should be discussed in a non-directive, value-free manner according to 1058 counselors (66%). Furthermore, 324 (20%) counselors mentioned Decision-Making Support as key aspect of counseling.

Regarding a 'good' client-decision, 1026 (64%) counselors mentioned the decision whether to opt for anomaly screening has to be well deliberated; 942 (59%) counselors said the decision should be based on relevant/correct knowledge; 319 (20%) counselors mentioned the decision has to be aligned with clients personal values and autonomous (157; 10%).

Discussion: Most counselors in our study stated that clients should make a well-deliberated decision whether to opt for prenatal anomaly screening. However, only one-fifth of the counselors mentioned Decision-Making Support to facilitate such decision as a key aspect of counseling suggesting that the interrelation between value-clarification, non-directiveness and Decision-Making Support in counseling needs explanation during counselors' education.

## O.35.3
## How counselors communicate uncertainty about multigene panel testing for cancer. An observational study.

**Niki Medendorp, Academic Medical Center**
**Marij Hillen, Academic Medical Center**
**Pomme van Maarschalkerweerd, Academic Medical Center**
**Cora Aalfs, Academic Medical Center**
**Anne Stiggelbout, Leiden University Medical Center**
**Ellen Smets, Academic Medical Center**

Backgrounds: Multigene panel testing is increasingly used to improve the identification of an inherited cancer predisposition. Panel tests may yield uncertainty, for example about the meaning of variants. Counselees need to be fully informed about these uncertainties, to make an informed decision about whether or not to perform such a test. Until now, it is unknown how uncertainty concerning multigene panel testing is communicated to counselees. Therefore, we investigated the manner and ways in which counselors discuss uncertainty regarding multigene panel tests, using simulated patients (SPs). Additionally, we investigated which characteristics of counsellors are associated with their communication.

Methods: Counsellors of all eight genetic centers in the Netherlands were instructed to discuss a multigene panel test with a SP. Using a script, SPs represented a counselee visiting for initial cancer genetic counselling who had had multiple cancer types. All consultations were videotaped and double-coded by two coders independently, using a coding scheme based on previous qualitative studies. All utterances of uncertainty by counsellors, framing and initiative of these utterances, and their verbal responses on scripted uncertainty expressions by the SP were coded. Three weeks prior to the consultation, counsellors filled out a questionnaire assessing their demographics, confidence in their own ability to communicate uncertainty, tolerance to uncertainty, attitudes towards shared decision making (SDM) and perceived social norm in how uncertainty should be communicated. Immediately after the consultation, both counsellors and SPs filled out a questionnaire assessing their satisfaction with communication, perceived degree of SDM and session realism.

Findings: Currently, we have videotaped 21 consultations out of a 30 planned, involving 10 clinical geneticists and 11 genetic counselors, 4 male, and with a mean age of 41 years. Results on the different types and frequency of uncertainties communicated by counsellors, their reactions to uncertain expressions by SPs and associations between counselor characteristics and the manner of communication will be presented.

Discussion: This study provides insight into how uncertainty regarding multigene panel testing is communicated, and whether counsellor characteristics matter. The results will inform future studies on how the discussion of uncertainty affects counselees and may be improved.

## O.35.4
## Reducing harm through relationship-centred care approaches with older adults experiencing homelessness

**Lara Nixon, University Of Calgary**
**Victoria Burns, University of Calgary**
**Megg Wylie, University of Calgary**
**Neil Drummond, University of Calgary**

Background: Older adults are a rapidly growing subgroup in homeless populations in many countries. Substance use is both a risk factor for and a consequence of, homelessness, poverty, and other mental health conditions, including depression and anxiety; homelessness is associated with accelerated aging and functional decline, poor health outcomes and increased mortality. Traditional abstinence-based approaches to care and housing focus mainly on changing individual's behaviour and are frequently ineffective for this population, overlooking critical contextual factors contributing to substance use, including poverty, homelessness, concurrent psychiatric conditions, stigma, and historical trauma. Harm reduction has been lauded as an important alternative but there is little guidance for individual clinicians and teams on best practice and how to operationalize harm reduction philosophy. This study aims to: explore the experiences of formerly homeless older adult residents and their care providers in a supportive housing environment which emphasizes harm reduction; identify best practices to inform approaches to care for older urban adults experiencing homelessness and complex mental health needs.

Methods: Case study using constructivist grounded theory, of a 70-suite congregate, long-term supportive living facility in a large Canadian urban centre, with on-site primary health and social services using harm reduction approaches for formerly homeless older adults. Data sources: in-depth interviews with residents and their service providers, focus groups with referring agency service providers, field observations and document analysis. Participants: men and women aged 55 years and older currently residing at the supportive living facility, and who experience multi-morbidity including active substance use (n=6); supportive living facility health and social service providers (n=7); and referring agency service providers (n=25).

Findings: Respectful reciprocal relationships are central to enacting harm reduction principles and involve an iterative cyclical process of (1) getting to know one another as individuals; (2) negotiating and co-creating rules; (3) developing a sense of community.

Discussion: Expanded definitions of harm reduction are needed, moving beyond individuals' behaviour to consider risk environments. Together with principles of relationship-centred care, this helps guide harm reduction practice, empower inter-professional teams to engage with and "meet people where they're at" and support reduction of harm related to substance use.

## O.35.5
## What determines the quality of a client-professional relationship in long-term care? A cross-sectoral qualitative study

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Background: In long-term care, the relationship between clients and care professionals is seen as fundamental for the delivery of high-quality care. This study aims to explore determinants of the client-professional relationship from the perspective of clients and care professionals in long-term care (LTC).

Methods: This participatory study took place in three LTC organisations providing care to three distinct client groups: older adults with a physical or mental frailty, persons with mental health problems, and persons with an intellectual disability. In each care organisation, one research team carried out the research. Each team consisted of

three to four client-researchers and two researchers. Clients were individually interviewed by a researcher and a client-researcher. We held focus group interviews with care professionals. Interview recordings were transcribed verbatim and analysed in three phases: open, axial and selective coding. Each research team discussed findings in a work meeting.

We interviewed 30 clients and 29 care professionals. All clients received care at least once per week for at least three months, were 18 years or older, and able to communicate in Dutch. Interviewed clients varied by the intensity of care they received, care setting and background characteristics.

Findings: We distinguished determinants of the care relationship at four levels: client, professional, interactional, and contextual. On client level determinants such as asking for help and giving feedback came forward. Listening, reliability and availability were described on professional level. On interactional level determinants such as relationship development, trust and equal positioning were found. On contextual level, continuity, lack of time and budget came forward. Many determinants were mentioned by both clients and care professionals, and substantial overlap between client groups was found.

Discussion: Most determinants of client-professional relationships appear to apply cross-sectorial. The explorative approach was chosen to capture a wide variety of experiences of respondents. This study can contribute to the knowledge on generic determinants of care relationships, and is useful for quality improvement initiatives.

## O.36.1
### Female gender explains emotional communication in home care

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Background: Emotional distress is often implicitly expressed rather than explicit in home care communication between older persons and nursing staff. Hence, implicit utterances can challenge the nursing staff attentiveness and responses to emotional concerns. Age related changes in experiences and expressions of emotions can occur with increasing age, and the ability to express and respond to emotional distress is often emphasised. Furthermore, older women are described as experiencing more disabilities and to express more complaints than older men do. However, little is known if and how gender effect the emotional communication in home care. Therefore, the aim is to investigate genders effects on emotional communication in home care.

Methods: This study has an explorative and cross-sectional design. Data consisted of 188 audio-recorded home care visits in Sweden, coded with the Verona coding definitions of emotional sequences (VR-CoDES) from home care visits. The sample included 31 nursing staff and 88 older persons. Generalized linear mixed model (GLMM) analyse was used for analysing the coded data.

Findings: The results present the nursing staff and older persons' characteristics as predictors for emotional communication in home care. Significant associations were found between female gender and the cues and concerns and responses to the cues and concerns in the communication. Female nursing staff received more cues and concerns than their male colleagues did. Moreover, female older persons expressed more cues and concerns, but also received more responses providing space for their cues and concerns, than the older males did.

Discussion: The presented predictors in emotional communication effect emotional communication. Female gender was a predictor explaining the emotional communication in home care. The gender aspect add to the challenges and complexity of emotional communication. Hence, a gender awareness is needed for those engaged in emotional communication. Therefore, the importance of education and further knowledge is here stressed in order to help nursing staff to detect and alter gender inequality in home care.

## O.36.2
## Hospice Nurse Communication: Self-rating of Effectiveness, and Comfortable Versus Difficult Topics

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Background: Home hospice nurses caring for patients and families at the end of life often discuss intimate, sensitive, and emotional topics. Some research suggests emotional topics are challenging for health professionals, but few studies ask hospice nurses about their self-perceived communication skills, and what they identify as comfortable or difficult discussion topics. Our goal was to capture hospice nurse self-reported communication effectiveness and to identify perceived domains of comfortable and difficult discussion topics.

Methods: Data were collected as part of a multi-site longitudinal study of hospice nurse-family communication from hospice enrollment till patient death. 184 nurses from 11 hospices answered two questions about 1) their self-perceived overall communication effectiveness and 2) effectiveness with difficult topics (1=Not at all effective to 5=Very effective). Nurses responded to open-ended questions asking them to identify topics they considered comfortable or difficult to discuss with hospice patients and caregivers. Descriptive statistics were calculated and thematic content analysis used to identify comfortable and difficult domains.

Findings: Nurses were predominately female (91%), Caucasian (93%), Median age 44 years (range 2171), and generally experienced (median 9 years as a registered nurse, range <1-46; median 3 years, range <1-23 as a hospice nurse). Most reported overall Effective/Very effective communication skills (88%). When asked about communication effectiveness with difficult topics slightly fewer nurses (81%) perceived themselves as Effective/Very effective communicators. Open-ended question domains included symptom management, medications, care delivery, emotion, family dynamics, and the dying process. Additional contextual analysis provided specificity in categorizing domains as comfortable or difficult. For example, the dying process was considered comfortable from an informational perspective, but discussing the dying process during patient death was identified as difficult. Three domains identified as difficult were not influenced by context: Suicidality, Patient abuse, and Caregiver medication diversion. Finally, most nurses indicated a desire for more communication training (68%) with 69% selecting one or more preferred delivery methods including workshops and teleconferencing. Discussion: Hospice nurses generally perceive themselves as effective communicators, yet the majority desire further communication training. Training focused on self-identified communication domains grounded in specific contexts can improve communication between hospice nurses, patients and caregivers.

## O.36.3
## How doctors recognise that their patient is worried: a qualitative study of patient cues

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Background: Recognising patient cues indicating worry or concern is essential for doctors to be able to successfully reassure worried patients. Given the paucity of evidence on the variety and nature of patient cues that may arise in practice, this study aims to describe patient cues that doctors recognise during clinical encounters.

Methods: We performed a qualitative study during which experienced General Practitioners (GPs) participated in stimulated recall interviews, using their own recently video-recorded consultations as a stimulus. First we re-analysed an existing dataset, consisting of 15 interviews during which GPs were asked to elaborate on their

communicative actions. Additionally, 12 GPs were interviewed specifically about how they recognised worry and reassured their patients. We used thematic network analysis during an iterative cycle of data collection and analysis.

Findings: GPs described four different categories of patient cues that in their experience indicated worry or concern. First, GPs mentioned non-verbal cues such as visible bodily reactions. Furthermore, GPs recognised worry based on verbal cues, which could be further categorised by type of concern (e.g. concern about having a serious disease, concern about the impact of the symptoms, concern about the treatment etc.). Moreover, GPs described behavioural cues such as the patient making a list of symptoms and questions. Lastly, GPs recognised worry based on previous knowledge they had about the patient, e.g. in case of serious illness in the (family) medical history.

Discussion: The identified cues may help other clinicians in recognising patient cues during their own encounters and can inform medical communication training. The accuracy of GPs' interpretations can be studied further by observing (video-recorded) encounters and objectively assessing cues and by exploring the patients' perspective.

## O.36.4
**Informal Caregivers' Perceptions: Challenges and Meaning Derived in Caring for Home-dwelling Elders**

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Background:  The growing older population (>65 years) has led to a rapid growth in informal caregiving. Caregiver responsibilities can include providing health, medical, emotional, household, transportation and financial support, serving as surrogate decision-makers, and managing care recipients' condition as a whole. Despite their integral role in maintaining care recipients' health, caregivers often receive little support for their own well-being. The present study aims to understand informal caregivers' overall experiences, their perceptions of barriers and suggestions for improving quality of caregiving in an urban underserved population of a US metropolitan city.

Methods:  Two, two-hour, focus group sessions, using a semi-structured Interview Guide, were conducted with 12 informal caregivers to identify experiences, barriers, unmet needs and resources vital for caregiving. Recruitment was conducted through posting flyers in local community settings and via snowball sampling. Institutional Review Board approval was obtained prior to start of study. Qualitative data analyses were conducted using Dedoose Web-based Qualitative Software. Emergent themes were extracted, transcribed and analyzed using thematic analysis.

Results:  Caregivers elucidated perceived barriers, unmet needs, and recommendations for programs and services to improve caregiving. Among the most prevalent perceived barriers was a lack of informational resources on caregiving. Regarding needs, caregiver support groups for learning about caregiving and alleviating caregivers' emotional burden, were most frequently cited.  Programs for legal support and for grief/bereavement services were recommended.  In addition to these, unsolicited emergent information included qualitative evidence of ways in which caregivers' derived meaning for their personal lives arising from the negative—i.e. challenges of caregiving. While prior research independently corroborates challenges and personal meanings of caregivers, the present study extends previous findings by delineating how both come to be inter-related.

Discussion:  Increased informational resources on caregiving and easy access to them are needed to facilitate caregiving. Emotional support for caregivers, e.g. support groups, could enhance caregivers' well-being and thus improve caring for loved ones. Implications for policy makers and providers necessitate conceptualizing caregiver and care-recipient dyad as a unit and therefore providing programs and services tailored for the needs of both–caregiver and care recipient, since implications for one will have consequences for the other.

## O.36.5
**What Makes Men Reluctant to Share Care Experiences With Peers? A Case of Japanese Son Caregivers**

**Ryo Hirayama, Tokyo Metropolitan Institute of Gerontology**

Background: Focusing on adult sons who serve as primary caregivers for their aging parents in Japan, my aim in this study was to explore psychological factors that affect these sons' un/willingness to share and discuss their care experiences in peer-support groups. Although peer-to-peer interactions have been indicated to help empower family caregivers, it has been known that few son caregivers (continue to) participate in such groups willingly in Japan. Using a qualitative approach, I sought to understand what made Japanese son caregivers reluctant to meet and communicate with their peers.

Methods: To collect data, I conducted personal interviews with 28 son caregivers who were recruited through referral from local clinics and human service agencies mostly in suburban areas of Japan. No participant joined any support group at the time of interview. All interviews were transcribed verbatim, which were analyzed to identify themes that were found across participants' narratives of their feelings and thoughts about peer-support groups.

Findings: Most participants knew about peer-support groups for men caregivers but hesitated to attend such meetings. Although their accounts of why they did not want to participate in peer-support groups varied, most pointed to group homogeneity (i.e., comprised only of son caregivers) as a disincentive for participation. Further, their reluctance to join such homogeneous groups was linked to competitiveness-oriented masculinity. For example, some participants were afraid that they might be seen as "weaker" than their peers; they expressed concern that their intolerance and vulnerability to stress might stand out compared to other caregiving sons. In their view, group homogeneity could highlight differences in toughness among men who were confronted with the same responsibility, which made them reluctant to participate in such a group especially when they were too exhausted to show their "rivals" how hard they had tackled the challenge of parental caregiving.

Discussion: Japanese son caregivers' reluctance to share their experiences in peer support groups can be explained at least partly by competitiveness-oriented masculinity. To better understand family caregivers' un/willingness to discuss their experiences with their peers, it is necessary to consider the potential impact of gendered behavioral norms.

## O.37.2
## Communicating incidental findings in imaging studies: medical students' considerations

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Background: Incidental findings are very common in studies using high-resolution imaging. Whether and how to communicate such findings to participants in a scientific study is an important ethical issue in clinical research. The aim of this study was to investigate the considerations of medical students whether to inform or not inform the research subject about incidental findings.

Methods: 229 medical students (65% females) from two German universities responded to an e-mail recruitment and participated in a web-based survey. 36% of them were preclinical students, 47% in the clinical phase and 17% were finishing their medical training program.

Findings: A **majority of the students (91%) agreed that the participant's 'right to know' is the most convincing argument to inform about the discovery of a medically suspicious abnormality, followed by the 'chance to save lives' and 'chance for early diagnosis'. Never**theless, most of the students believe that you have to decide whether the information is either more useful or more harmful to the research subject and see this as a challenging situation. The risk of communicating a falsepositive finding is considered as harmful and an argument for not informing the **subject. The respondents strongly agreed that the most convincing argument not to inform is the participant's 'right not to know'. However, only 22% would accept it and would not inform the subject. Most of th**e students would ignore it in specific cases (71%) and few even in any case (7%). A vast majority believes that participants are not able to anticipate the consequences of their choice either to know or not to know about incidental findings.

Discussion: The results show that medical students are aware of the participant´s right of selfdetermination that **includes not only the 'right to know' but also the ethical concept of the 'right not to know'. Doubting that the participant's decision to be not informed** about an incidental finding is well-founded seems to be the justification to neglect the decision. There is a need for clear guidelines how to ensure a good quality of informed consent and how best to balance the individual autonomy and professional beneficence.

## O.37.3
## How to improve intra- and interpersonal Competences in Medical Education

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**Jan Ehlers, Witten/Herdecke University**
**Gabriele Lutz, Witten/Herdecke University**

Background: Professional intra- and interpersonal competences (iiCs), such as e.g. reflection and communication are an essential part of medical expertise and are trained through communication trainings and other personal professional development interventions. However, at the clinical learning and working place so far, they are often taught in an unstructured, incidental way being overruled by an unintended reality, and partly tend to decrease during medical education. Other professional fields, such as pedagogy, psychology, aviation etc. already implemented iiCs in education and practise. Against this background, the study asked about the role of iiCs in medicine, the underlying reasons hindering and ways to improve their implementation in medical curricula.

Methods: Semi-structured interviews with 21 international experts with medical and nonmedical background have been evaluated qualitatively with grounded theory.

Findings: The experts stated that iiCs are an equally important part of treatment success and described a generally high developmental need. The central obstacle for their implementation was named as a defensive attitude towards growth in iiCs through personal feedback and supervision. This attitude is reflected in the Carol Dweck's fixed mindsetconcept, which has proven to inhibit learning. The fixed mindset in medicine influences the profession on personal, curricular and institutional levels, and is sustained by a complex system of personal and environmental factors. Different requirements and methods for the implementation of curricula for the improvement of iiCs were described which worked to change the culture in other vocational fields and which improved quality – such as e.g. the valuation of iiCs in students' selection and teaching, or the openness of clinical teachers to receive critical feedback in order to grow.

Discussion: The defensive attitude towards learning in the field of iiCs appears to be a subtle but powerful obstacle for implementing iiCs in medical training. Changing this attitude can probably not be achieved through personal training of students only, but by a cultural change on an institutional level as well. Other vocational fields encourage, which factors on the personal but also on the institutional level were essential to implement new educational structures.

## O.37.4
## Lessons Learned from 40 Years of Humanistic Aspects of Medical Education seminars

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**Jerome Lowenstein, NYU School Of Medicine**
**Michele Sarracco, NYU School Of Medicine**

Background: The Humanistic Aspects of Medical Education (HAME) program at a US Medical School was developed to acknowledge and examine medical students' reactions when confronting death, suffering and other stressful experiences during their medical training. HAME seminars provide a forum for students to discuss the many complex patient care challenges and dilemmas that may come up during their twelve week Medicine clerkship. The weekly meetings (60 minutes) are led by a facilitator trained in group work. They have been a required component of the curriculum for forty years.

Instructional methods: The groups are composed of 8-10 students. There are no assigned topics, and no learner assessments. All sessions are confidential to foster trust among the participants. Students are asked to bring topics to the table. HAME is a time for active reflection with peers as they develop their individual professional identities. It provides an opportunity for the students to explore their own and others' attitudes, thoughts and feelings and discuss how these may be affecting their studies, practice and work with patients and teams. Some of the topics raised in the groups are: coping with the death of a patient, working with other healthcare providers, understanding cultural differences among patient groups, and balancing their dual roles as students and members of the patient care team.The presentation will include a video sample of an actual session.

Findings: Student feedback has been positive, noting that the discussions led to a better understanding of their patients and helped them in communicating with them, the families and other members of the healthcare team. Students agreed that the issues raised by the group were important to them and they looked forward to the meetings.

Discussion: The HAME seminars support students during a critical phase of their training: the transition from preclinical to clinical education. Encouraging the students to raise issues of concern prompts them to take an active role in their learning. Sharing diverse perspectives and listening to peers helps to strength team work skills and fosters empathy in the clinical setting.

## O.37.5
## The intersection of ethics, law and shared decision-making

**Sharyn Milnes, Barwon Health**

Background: Health care decision-making has swung from the era of benevolent paternalism, to pure patient autonomy, and now rests in the collaborative middle-ground of shared decision-making(SDM). This model recognises the expertise and experience of the professional and blends it with the patient's ideas of a good outcome, based on their values and preferences for how to live well.

The iValidate program is an education and research program at Barwon Health aiming to improve SDM for patients with a life-limiting illness(LLI). An important part of this program is understanding the operation of SDM and where this fits in our ethical and legal frameworks of practise.

Methods: Education of communication skills using the Calgary-Cambridge model and how the interaction with a relational theory of health ethics and the legal framework.

Program objectives:

1. A process for staff to identify patients with LLI,

2. Support and expand clinician communication skills with an understanding of the intersection of ethics and law,

3. Provide a process of care that incorporates SDM in the daily practice of clinical units, and

4. Measure clinical and person-centred outcomes.

Findings: Prospective before and after data has been collected demonstrates significant improvement in documentation of patient values and preferences, medical advice based on these values and concordance with actual care received. Discourse analysis of simulated discussions of participants before and after indicates a relational rather than atomistic model of patient autonomy during discussions of goals of management.

Discussion: Legal and ethical constructs hold the concept of self-determination or autonomy as an important principle. However, both systems also recognise the nuances and dynamic nature of decisions involved in the actual operationalisation of autonomy in the context of health. The law requires that valid consent includes information is provided to patients or their surrogates, that is "materially relevant" to the patient. Bioethical concepts of autonomy include relational and personal wishes for how to live well, as well dynamic considerations that adversely affect a patient or surrogate's ability to make a purely autonomous decision. Skilful SDM encourages ethical interactions with patients and their surrogates as well as safeguarding legal obligations.

## O.38.1
## "Using a booklet to enhance patient's autonomy and behavioural change in neurological dysphagia"

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Introduction: Dysphagia is a swallowing disorder that imposes changes in food habits to foster clinical recovery and reduce the occurrence of dangerous complications such as malnutrition, dehydration and aspiration pneumonia. Family members, caregivers and the patients, relay on health professionals information and support to perform these changes after discharge. Previous studies established the positive impact of written information, in particular if individualized instructions are included, in patient's empowerment and efficiency.

Objective: To develop and validate an individualized informative booklet to support and promote changes in food habits in patients with dysphagia. The booklet will be delivered by health professionals, at the time of hospital discharge, with the purpose of providing clear, specific and tailored instructions.

Methods: A literature review allowed for the development of a prototype which was later evaluated by a panel of four experts in speech therapy and four experts in clinical communication (n=8). This evaluation was carried out using online responses to open answer questions. In addiction a focus group of patients and caregivers (n=6) discussed the content, language, organization, layout, design and artworks of the experimental version of the booklet.  The suggestions were analysed and integrated in the final version.

Findings: The booklet was written using simple language, organized into different subtopics - introduction about signs and symptoms of dysphagia, individualized options of food consistency and food preparation and signs, causes and complications of dysphagia.  Information about postures that facilitate feeding was included, and how and when to contact health professionals. An appealing layout with illustrations facilitates the understanding of written information.

Discussion: The use of booklets including clear and tailored information has been reported to support verbal interactions and respond to patients and family needs in several medical diseases. In patients with dysphagia, who need to introduce difficult changes in feeding behaviour, the present booklet conveys useful information, promoting adherence and recovery, and facilitating patient-health professional communication.


## O.38.2
## Patient centred written information: teaching clinicians the 'right' way to 'write'

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St Vincent's Hospital Melbourne (SVHM) is a tertiary public health facility with over 6000 staff. Patients and families are routinely given written material, including information about their condition, procedures and medications. 60% of Australians have low health literacy (ACSQHC, 2017) and 48% of SVHM patients are from a CALD background. This, along with other factors that impact on a patient's ability to understand written material such as communication disability and low literacy, can make it difficult for patients to read and understand written health information.

The objective of the pilot curriculum was to teach clinicians the knowledge and skills to write for patients so that they can provide written information in an accessible and easy to understand format.

Methods:  A needs assessment was completed prior to designing the curriculum for the workshop. Teaching methods included lecturing, a consumer presentation and a practical component. The workshop provided opportunities for peer interaction in small groups, including opportunities to review written material and rewrite and to provide feedback to peers. The small groups were supported by a facilitator.

Staff were notified about the workshops via staff bulletins and invited to register. Workshop participants completed pre and post workshop questionnaires investigating their knowledge and a post workshop evaluation.

Findings:  47 staff members attended a pilot workshop. There were improvements in understanding of health literacy, understanding the difficulties patients might experience reading health information, strategies to support understanding written material and the importance of involving consumers in the development and evaluation of written information. Participants also reported that they were more confident to write patient centred health information.

87% of participants rated the workshop as very good or excellent. Participants rated the practical component of the workshop highly and wanted more time to work through their patient information material and gain feedback from their group.

Discussion:  Writing for patients is a communication skill. There is a need to learn and practice the skills to write information that meets the needs of patients. Providing written information that is easily read and understood is essential to patient centred care and to improving patient recall and understanding.

## O.38.3
## Patient safety in the hospital setting – Evaluation of a patient information brochure

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Background: Patients can considerably contribute to treatment quality and safety. This study evaluated a patient brochure aiming at increasing patient information and involvement in patient safety. The brochure includes recommendations on patient safety (medication, hygiene, communication) and empowers patients to increase safety-enhancing activities and behaviors.

Methods: On three surgical wards at a German University Medical Center, 264 patients (60% female, mean age 53 years) received the newly developed brochure during their hospital stay and participated at discharge in a cross-sectional survey. Qualitative interviews on the implementation of the brochure were conducted with 12 physicians and nurses (HCPs).

Primary outcome was patients' (actual and intended) safety-related behavior. Secondary outcomes were patients' and HCPs' attitudes and experiences with the brochure. Regression analyses were conducted to identify predictors for safety-related behavior. Interviews were analyzed using thematic analysis.

Findings: Both patients and HCPs report positive attitudes towards patient information and involvement in patient safety. More than 90% of the patients wish to receive information on possibilities to contribute to medical error prevention and more than 80% believe that patients can help to avoid adverse events. Two thirds report an increased attention and about half of the patients a change of behavior due to the brochure. From the patients' perspective, a major barrier to patient involvement in safety issues is fear of negative reactions. HCPs are concerned about possible overcharging of patients.

Significant predictors for the acceptance of safety recommendations were safety-related locus of control and subjective norms ($R2=.206$). Actual safety behavior was associated with acceptance of recommended behavior and duration of the hospital stay ($R2=.518$).

HCPs were ambivalent with regard to the implementation of the brochure. While two thirds think that it contributed to enhancing patient safety, the majority feels that it has little effect on their own interaction with patients.

Discussion: The positive reception and evaluation of the brochure indicate its usefulness and applicability in the surgical inpatient setting. The brochure might be a useful tool to enhance safetyrelated communication between patients and HCPs. However, a successful implementation will depend on the consideration of barriers and concerns mentioned by patients and HCPs.

## O.38.4
## Short length of stay and the discharge process: Preparing breast cancer patients appropriately

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**Holger Pfaff, University of Cologne**
**Ute Karbach, University of Cologne**

Background: Breast cancer is the most common cancer among women worldwide, increasing the relevance of an efficient and successful care process within the healthcare system. As length of stay in the hospital decreases, e.g. due to standardization of processes or changes in types of treatment such as removing drains early, patients' satisfaction with the length of stay varies. We hypothesize that a successful preparation by informing the patient adequately trough hospital staff can improve this assessment. Furthermore, the effects of patient characteristics (age, education, health insurance, secondary illnesses, and health related quality of life), type of surgery and length of stay, as well as an interaction between length of stay and preparation for discharge are analyzed.

Methods: Data of 4,424 newly diagnosed breast cancer patients from a cross-sectional survey are analyzed. The data are collected with the Cologne Patient Questionnaire – Breast Cancer between 1 February and 31 July 2017 in 56 breast cancer centers in North RhineWestphalia, Germany. Logistic regressions are used to test hypotheses and analyze the binary dependent variable (0=appropriate/1=too short).

Findings: Overall, patients rate the length of stay mostly as appropriate (0=4,424; 1=231). However, patients who felt better prepared by the hospital staff for discharge are less likely to rate their stay as too short. A longer stay in the hospital further decreases this likelihood. The **effect of length of stay is moderated by patients' assessment of** preparation for discharge. A good evaluation of the preparation improves the satisfaction with length of stay by patients leaving the hospital sooner. Furthermore, better educated patients with better health related quality of life, fewer secondary illnesses, public health insurance with additional private insurance and breast-conserving surgery evaluate their length of stay as appropriate.

Discussion: The results emphasize the importance of information provision and preparation to patients with short hospital stays. The challenge is especially high considering the reduced time for face-to-face conversations. Discharge talks are therefore particularly relevant and must be further focused and improved with particular attention to be given to severely ill or less educated patients.

## O.38.5
## Use of simulated patients and experiential learning for formative and summative assessment to induct nurses providing telephone-based cancer information and support

**Megan Chiswell, Cancer Council Victoria**
**Lane Katherine, Cancer Council Victoria**
**Monica Conway, Cancer Council Victoria**

Background: Cancer Council Victoria's (CCV) Information and Support telephone line is staffed by oncology nurses who use a niche skill set to provide informational, practical and emotional support to people affected by cancer. Given the complexity of calls received, nurses staffing the line have at least five years oncology experience and undergo robust induction. Since 2008, simulated patients (SP) have been utilised as part of this process for both formative and summative assessment. Complex SP cases requiring the nurse to address presenting concerns, assess distress, conduct a therapeutic discussion, provide education, information and referral are key to the assessment of readiness to begin independently taking patient calls.

Methods: Induction is completed over four weeks, part time, with simulated assessment calls conducted in the final week. Consultations between the nurse and Nurse Manager inform the development of two learner-centred SP scenarios for experiential learning and assessment. Typical scenarios include dealing with those who are highly distressed or angry or requesting information outside nurse or CCV scope of practice. Simulated calls are recorded so both nurse and Nurse Manager can review at completion, against a standardised call assessment tool. The SP also provides feedback on the interaction.

Findings: 34 nurses have been inducted to the Information and Support telephone line using this process, with the majority of SP scenarios focusing on complex psychosocial issues, practical issues or a balance of both. Nurses report that using an experiential learning model as a basis for assessment provides a realistic and authentic way for both nurse and Nurse Manager to assess readiness to begin taking calls.

Discussion: The use of SPs and complex scenarios provides a safe but realistic learning opportunity for induction given the nature of calls typically received. This approach is supportive of reflective practice and allows the nurse to **elicit the necessary information by learning to 'listen between the lines' in the absence of access to patient notes** and non-verbal cues. Given the uniqueness of this type of supportive care service, there is scope to share and implement this tailored skill development and quality assessment model across other similar telephone-based services in healthcare.

## O.39.1
## Healthcare professionals' experiences with palliative patients' transfers: a focus group study.

**Fien Mertens, Ghent University**
**Peter Pype, Ghent University**
**Myriam Deveugele, Ghent University**

Background: Inter-professional communication is challenging when transferring palliative patients from one setting to the other (hospital, hospital's palliative care unit, home and nursing home). These transfers have become more common, since palliative care has become more complex, due to demographic (increased prevalence of

multi-morbidity and higher life expectancy) and social changes (more people living alone). The complexity of palliative patients' care requires a collaborative approach between involved professionals from the different settings. For inter-professional collaboration to be efficient, good inter-professional communication is a prerequisite.

The research questions were:

What are healthcare professionals' views with respect to inter-professional information exchange and communication during palliative patients' transfer of care setting?

What are the perceived factors influencing the inter-professional collaboration?

Methods: Nine focus group discussions were held with various professionals (general practitioners and medical specialists, nurses, psychologists, dieticians, social workers, coordinators. N:53) from different palliative care settings. Constant comparative analysis was used.

Findings: Participants reported that specialists informed the patients on disease stage and prognosis late and insufficiently. This hampered open communication on end-of-life decisions and impeded a timely and efficient transfer to the home situation or the palliative care unit.

They considered timely and sufficient information flow between all professionals involved as most important. A perceived barrier for inter-professional collaboration was the lack of a shared electronic patient record. Efficient multi-disciplinary team meetings with shared care goals were regarded essential, though often lacking.

Knowing each other personally positively influenced the inter-professional communication. Perceptions of hierarchy negatively influenced the inter-professional communication and collaboration, within and between the hospital and home care settings.

Discussion: To enhance quality of care when transferring palliative patients, more effort is needed for collaborating professionals to obtain shared care goals and decision making.

The availability of a shared electronic patient record can meet the needs of an efficient information flow.

These elements contribute to enhanced alignment and efficient inter-professional collaboration, being part of integrated care.


## O.39.2
## Integrating Cultural and Spiritual Sensibilities in Workshops Focusing on Difficult Conversations in Healthcare

**Andrew Thompson, Auckland District Health Board**
**Jo Hegarty, The University of Auckland**
**Toni Shepherd, The University of Auckland**
**Summer Hawke, The University of Auckland**
**Melissa Heyward, Royal Children's Hospital**
**Elaine Meyer, Harvard Medical School**

Background: Starship Children's Hospital, Auckland, New Zealand, serves a diverse cultural population with more than 200 ethnic groups. During the recent census, 48% of Auckland residents identified as Māori, Asian, or Pacific Island.

Objectives for participants:

- To provide opportunities to share their communication knowledge

- To review and practice a range of communication strategies and approaches

- To explore and practice collaborative approaches to teamwork during difficult conversations

- To discuss and experience communication approaches to promote cultural engagement

- To learn the basics of conducting communications workshops

Methods: We developed an interdisciplinary, multiprofessional, simulation workshop focused on difficult conversations, to meet the unique social and cultural needs of our paediatric setting. Adapted from the Program to Enhance Relational and Communication Skills in combination with the clinical and educational experience of our

faculty. High awareness of the specific cultural nuances of working alongside Māori was key for the working group as they developed the simulations.

The full day workshop consisted of ensuring a safe environment for participants, developing an empathic focus (video and shared experience in break-out groups or pairs), shared strategies for success

(brainstorming, whiteboard), principles of good communication in a healthcare setting (didactic lecture) followed by simulated healthcare conversations. Each simulation involved a multiprofessional team. Professional actors from diverse cultural backgrounds, ensured a high realism for participants and participated in feedback to participants.

Participants completed pre-and post-workshop questionnaires. 100% of participants reported an improved sense of preparation, communication skill and confidence when engaging in difficult conversations. 88% felt the workshop increased their preparedness for difficult conversations. Comments included: " I had moments of intense feelings, appreciation, being pushed out of my comfort zone and new hope seeing everyone's commitment and desire for improved communications." Participants reported the benefit of learning from other healthcare workers. 100% of participants would recommend the workshop.

Discussion: This teaching innovation offered a unique opportunity to explore cultural engagement, whilst simulating difficult conversations. The focus on working alongside Māori presented opportunities to consider wairua (spirituality) and mana-enhancing (self-esteem, status, life force) practice. Fourteen of the eighteen participants have continued as faculty and courses are arranged for 2018.

## O.39.3
## Interprofessional communication during out-of-hours service:
## Implications for palliative patients.

**Peter Pype, Ghent University**
**Fien Mertens, Ghent University**
**Els Vanhecke, Ghent University**

Background: Most palliative patients want to be cared for at home until death. Nevertheless hospital admissions occur often during out-of-hours. This is partly due to lack of information on palliative patients' medical status and treatment, as well as on their views on and preferences in care delivery at the end of life. Sharing all relevant information is of paramount importance to ensure high quality continuity of care during out-of-hours care delivery. This information transfer is often lacking or is incomplete in primary care. This study aims to explore: 1. general practitioners' and out-of-hours physicians' needs and preferences with respect to information transfer; 2. barriers and facilitators in information sharing.

Methods: Mixed methods design: semi-structured interviews (n=8) and questionnaires (n=59) with general practitioners in Belgium. Thematic analysis of interviews served as a guide for the design of the questionnaire. Descriptive statistics were calculated on questionnaire results.

Findings: 1. Needs and preferences: Information transfer was highly valued both by general practitioners and out-of-hours physicians. Diagnosis, medical treatment and patients' preferences were deemed important. However almost 40 percent of out-of-hours physicians complained about incomplete information transfer. Information is mostly delivered through a patient file at the patient's home or by informing the palliative home care team. To a lesser extent a shared electronic patient record was being used or phone numbers were shared among physicians. 2. Barriers and facilitators: Practical barriers such as difficulties to access the online patient file hindered information sharing as reflections on privacy did when it concerned sensitive information. The presence of sufficient information transfer by the general practitioner prompted out-of-hours physicians to report comprehensively upon care delivery.

Discussion: Although information transfer is deemed important by all participants, our study reveals that this often happens incompletely. Practical barriers as well as privacy issues are mentioned as explanations for this shortcoming. Optimisation of shared electronic patient records might enhance information transfer. Reciprocal communication among physicians can enhance physicians' information sharing.

## O.39.4
## Interprofessional space: Amplifies client voices and expands graduates' communication perspectives

**C. Jane Morgan, Auckland University Of Technology**

Background: Graduates from health education programmes exit with knowledge, skills and values commensurate with their chosen profession. Yet, contemporary health care environments require practitioners who are adept at communicating among professions, with a noticeable shift from profession-centric to client-centred communication as pivotal to effective, efficient client care. In New Zealand, undergraduate health science programmes remain siloed. Auckland University of Technology (AUT) has the most diverse health faculty of the New Zealand Universities, including a Bachelor of Health Science (BHSc) qualification in eight clinical professions. Although students are located in close proximity, there is limited curricular opportunity for students to communicate among professions. Since 2015, AUT has developed several interprofessional student-led programmes where students in their final year of undergraduate study in various health professions, work together with clients at a purpose-built health clinic. Each programme has been developed, piloted and then undergone an evaluative study in its second iteration to determine if the aim of developing students' interprofessional communication and practice skills has been accomplished.

Methods: A primary teaching aim in each eight-week programme is for students to experience "real time" interprofessional assessment, planning, intervention and evaluation of "what matters" from the client's perspective, while communicating and working with clients. The experiences and outcomes for clients, students and educators have been evaluated through both post-programme feedback and mixed methods research.

Findings: Clients identify a positive shift in "being heard" and "being involved" in clinical decision-making and in planning to self-manage and optimise their own health status.

Students indicate a positive shift in their perspectives from profession-centricity to an expanding vocabulary and confidence in communicating among professions. Students express their desire to continue fostering interprofessional communication and practice "space" as graduates.

Discussion: Through engaging in interprofessional programmes, clients are being heard and AUT students are developing their ability to communicate among professions. This reduces fragmentation for clients and lessens the risk of miscommunication errors amongst health professionals. In addition, students' health perspectives, which underpin and inform professional practice, expand to incorporate other professions and clients.


## O.39.5
## The clinical "stranger" effect: examining communication between consultants and care teams

**Justin Clapp, Department of Anesthesiology & Critical Care, University Of Pennsylvania Perelman School Of Medicine**
**Sushmitha Diraviam, Department of Anesthesiology & Critical Care, University Of Pennsylvania Perelman School Of Medicine**
**Meghan Lane-Fall, Department of Anesthesiology & Critical Care, University Of Pennsylvania Perelman School Of Medicine**
**Lee Fleisher, Department of Anesthesiology & Critical Care, University Of Pennsylvania Perelman School Of Medicine**

Background: Medicine is increasingly organized around multidisciplinary care teams tailored to the treatment of particular conditions. These teams consult regularly with specialists when confronted with situations outside their areas of expertise. The nature of the interaction between teams and these consulting "strangers" shapes the role of the consultant in medical decision making, potentially impacting the course of care chosen and subsequent outcomes—and yet it has been the focus of little research. This study examined interactions between intensive care unit (ICU) teams and nephrologists in order to develop an explanatory model of team-consultant communication.

Methods: This study was performed at an American academic hospital and consisted of semi-structured interviewing and observation. Interviews were carried out with nephrologists and with the ICU team members with whom these nephrologists regularly consult to explore their experiences in communicating with one another. We also directly observed interactions between ICU teams and renal consultants. Transcripts of interviews and observational notes were coded using *NVivo 11* to reveal prominent themes.

Findings: The role of nephrologists in ICU care varied contingent on several aspects of their interaction with teams. For example, teams varied in whether they typically sought to converse with nephrologists about the course of care or simply called on them to oversee technical procedures such as dialysis. In those scenarios where renal consultants played the role of proceduralist, discussion about how care should be managed was sometimes seen as unproductive—by both consultants and teams—due to acknowledged differences in how nephrologists and ICU providers approached renal interventions. For instance, nephrologists usually framed dialysis as a worst-case scenario to be avoided if possible, while ICU teams saw it as a solution for a problem they needed to overcome in order to improve a patient's condition.

Discussion: This study described marked variation on a case-by-case basis in how consultants interacted with care teams and thus how they shaped patient care. Additional research will be necessary to identify the full array of factors that cause this important communication to take its various forms. Furthermore, studies are needed that link different forms of consultant-team communication to patient outcomes.


## O.40.2
**Embedding sustained change in clinical practice through a novel approach to communication skills training: evaluating the EC4H programme**

**Belinda Hacking, NHS Lothian**
**Fiona Wilson, NHS Lothian**
**Gill Highet, NHS Lothian**
**Michael Shankleman, NHS Lothian**
**Kirsty Boyd, NHS Lothian**

Background: For 14 years, the Effective Communication for Healthcare Professionals (EC4H) programme has delivered systematic training in clinical communication in Scotland. The EC4H programme comprises one and two-day simulation-based workshops, facilitated by senior NHS clinicians, designed to meet the needs of doctors, nurses, senior clinical managers and other health care professionals working in the NHS. The programme is underpinned by a psycho-social approach which conceptualises learning as embedded in dynamic relationships among people and within their clinical contexts. This paper shows how participants have integrated their learning into routine practice to create sustained changes in clinical care.

Methods: The evaluation took a mixed methods approach, combining three sources of data – interview data from a purposive sample of 13 telephone interviews, quantitative and qualitative data from pre and post course evaluation forms generated by 167 participants across 20 communication skills courses held between 2011 and 2016. Qualitative data were analysed thematically using the Framework Method. In the quantitative analysis, the Wilcoxon Signed Rank Test was used to rank self efficacy.

Findings: The evaluation showed significant improvements in perceived competence across five dimensions - handling challenging emotions, reaching shared decisions, responding to complaints, effective teamwork and addressing poor performance. The interactive, 'wind-back' approach used in role plays combined with a judicious use of communication theory provided opportunities for existing paradigms to be challenged and reconstructed; this helped to reinforce learning. Participants reported meaningful and sustained changes in attitudes and behaviour in their day to day practice when interviewed up to 18 months after the course, in particular, a shift towards a more relationship-centred, collaborative approach to complex communication tasks.

Discussion: The EC4H communication skills programme applies an educational methodology which promotes learning through social and material relationships, it equips health care professionals with enduring skills which enable them to achieve an effective dialogue and find 'common ground' in their day to day practice. The programme hosted in NHS Lothian continues to expand with partner NHS boards across Scotland and internationally now offering local workshops delivered by tutors trained and accredited by EC4H lead tutors.


## O.40.3
**How can a large acute UK hospital improve doctors' clinical communication? An innovative pilot project using simulated patient scenarios in the work place setting.**

**Claire Bates, Barking, Havering and Redbridge University Hospitals NHS Trust**
**Nadeem Moghal, Barking, Havering and Redbridge University Hospitals NHS Trust**

Background:  The consequences of poor communication in healthcare are well recognised yet few organisations have a coherent strategy to improve practice in this area. Structured postgraduate training has been limited to cancer, palliative care and general practice and the majority of senior clinicians will not have received formal feedback on their communication skills unless volunteering or conscripted to attend a course. In a large acute hospital, could a bespoke intervention in the workplace become part of essential training and support improvement?

Method: Facilitator, actor and learner worked together in a 90 minute session. Participation was voluntary. A simulated patient role play with video feedback provided an immediate formative intervention and an opportunity to collect data. Three tools were used to assess communication; Cambridge Calgary, RANZCOG and Communication Assessment tool. Actor and participants evaluated the pilot project after attendance.

Results:  10 Consultants and 5 junior doctors took part, the majority were international graduates. Consultants had an average of 25 years qualified experience. Only 4/15 scored more than 50% on assessment.  2 Consultants who had no undergraduate training in communication scored the lowest on assessment (23% and 27%, average 48%). Consultants scored higher than the juniors across all assessment domains but the same strengths were evident across the whole sample; initiating the conversation, building a relationship and gathering information. Giving **information was universally weak and this was born out by the actor's qualitative feedback. There was a strong positive correlation between the facilitator's and actor's assessment of the communication. 12 participants** evaluated the intervention. There were high scores for usefulness (92%), safety (98%), feeling respected (97%) and interest (90%). 100% would recommend the training.

Discussion:  The pilot demonstrated that very senior and junior doctors need support and ongoing education in this area. Although there were limitations and sample size was small, the experience was very positive for participants and all were able to describe learning gained after attendance. The authors are planning to progress a multifaceted approach, including grounding in basic theory as well as simulated patient scenarios. Education will be targeted towards areas identified as weaker across the organisation.

## O.40.4
## Implementing a national strategy for improving healthcare communication in Austria – An update

**Marlene Sator, Austrian Public Health Institute**
**Peter Nowak, Austrian Public Health Institute**

Background:  Current Data shows that the quality of patient-provider communication in Austria is below average within the EU. International literature suggests that healthcare communication has been getting worse rather than better. Despite all the efforts in research and teaching, communication skills do not appear to have found their way into everyday clinical practice. For Austria, a comprehensive national strategy for improving healthcare **communication was developed within the framework of the Austrian National Health Target "Enhancing health literacy" in 2016.**

Methods:  The process follows the four phases of the Public Health Action Cycle: assessment, policy development/formulation, implementation and evaluation.

Findings:  Assessment involved defining what good quality healthcare communication is, its relevance regarding outcomes and its status quo in Austria as well as reviewing (inter-)national practice models for improving it. A national policy was then developed which suggested an intervention model for improving healthcare communication and gave recommendations for action. The policy was passed by the main decision-making body responsible for the Austrian health reform. Its implementation has started in 2017 involving all relevant stakeholders. It is based on the level of the individual, the level of healthcare institutions and the level of the health system and includes measures in four fields of action:

- empowerment of health professionals (train the trainer-certificate-programme for communication skills training in healthcare organizations, trainer network, network of simulated patients, practical manual for facilitators),

- empowerment of patients (evidence-based patient training and campaigns, evidence-based, comprehensible and effective written patient information),

- organisational and process development (best practice projects and pilot projects for helping healthcare institutions to further develop their organisational structures and processes on the basis of an initial self-assessment in order to support good healthcare communication) and

- healthcare system development (dissemination of the strategy, national network for initiatives for improving healthcare communication, support for pilot projects).

According to the HLS-EU report 2012, 32% of the Austrian population state that they find it 'difficult' to use information the doctor gives them and 22% state that they find it 'difficult' to understand what their doctor says to them. These data and others will be used in the planned HLS-EU surveys in 2019 and 2024 to follow-up the outcomes of the implementation.

Discussion: Large-system transformation for improving healthcare communication should not be limited to empowerment of individuals but should include organisational and process development and changes in the entire healthcare system.

## O.40.5
## Lessons learned from developing and applying health literacy tools in Portugal

**Débora Miranda, National School of Public Health, Portugal**
**Patrícia Barbosa, Ministry of Health, Portugal**
**Constantino Sakellarides, Ministry of Health, Portugal**

Background: Research has shown that low health literacy levels are associated with an inefficient use of health care services. Facing low health literacy levels in Portugal, the Government has recognised the importance of improving citizens' ability to access, understand and use health information. In 2016, the Ministry of Health launched a National Programme for Health Literacy and Integrated Care, in line with similar tendencies across Europe and other regions.

Methods: The Programme includes the development of various health literacy tools: i) a digital library which collects, validates, publishes and disseminates already existing health literacy resources; ii) a series of e-books on various health-related subjects (e.g. falls in elderly people, healthy relationships, winter care and social isolation); and iii) a digital personal diary where patients can organise and customise information related to their health. Each tool is supported by technical, scientific and management teams, as well as advisory committees who provide strategic guidance.

Findings: The tools have been available on the National Health Service website (Portal SNS) since March 2017 and various evaluations have been carried out. A dissemination plan has been implemented in order to ensure that tools are not only made available where people need them, but also tested in the field through themed, carefully-monitored activities, both in health care environments (e.g. health centres) and in public spaces (e.g. local libraries). Preliminary findings show high levels of adherence to the tools' content and related activities. For exemple, one e-book dedicated to winter care has had over 3 million online views and more than 3,200 patients have completed the evaluation survey about the digital personal diary. Feedback is being integrated in improved tool versions.

Discussion: Lessons learned to date from developing and applying these tools could inform and improve future initiatives targeting low health literacy levels. The dissemination of the tools could also lead to the development of important networks of citizens, professionals and institutions engaged in providing good quality health information to citizens.

## O.41.1
## Improving clinical communication skills for international students using inclusive pedagogies

**Bella Ross, Monash University**
**Averil Greive, Monash University**
**Binh Ta, Monash University**

In Australia, professional health degrees have seen a rapid increase in international student numbers in recent years. The international student cohort has different needs to local student cohorts, particularly in the area of clinical communication. This presentation reports on the findings from current research into the perspectives and experiences of clinical educators of international social work students across Australia. The research data includes 74 anonymous survey responses and 15 in-depth interviews with clinical educators across Australia.

A key finding of this research is that clinical educators' approach to working with international students is different to how they work with local students. Educators perceive that one of the biggest challenges they face when

supervising international students is language and communication issues, and that they find it particularly difficult to teach communication skills to international students. Often, educators state that the extra time and support required to teach international students may deter them from accepting further international students on placements.

One issue raised by the respondents is whether it is the university's or the placement provider's responsibility for developing students' communication skills. While some clinical educators are willing to take on extra teaching work, others are not, instead insisting that the university should help develop the students' communication skills up to a certain standard before sending them on placement. Most of those surveyed, however, agree that professional development aimed at teaching international students would be beneficial and they would be interested in receiving such training.

We argue that educators should be provided with specialised training in inclusive and transcultural teaching practice developed by universities with knowledge and expertise in this field. Such pedagogies aim to address the issue of how supervision of international students is perceived. Inclusive and transcultural teaching practice positions the relationship of the student and the educators as one of mutual learning, where the responsibility to learn is shared by the student, the university, the agency and the clinical educator. The implications for healthcare communication is that international students are viewed as global citizens with valuable contributions to be made in the teaching and learning space.

## O.41.2
## Residents' stories about communication challenges: a narrative study

**Jane Ege Møller, Aarhus University**
**Charlotte Rønn Clemmensen, Aarhus University Hospital**
**Matilde Nisbeth Brøgger, Aarhus University**

Background: The transition from medical student to young doctor can be challenging. Previous studies have demonstrated that the transition can be perceived as stressful because of increased responsibility, uncertainty, lack of support and lack of medical knowledge and credibility. Some studies show that communication with colleagues is challenging for residents. Few studies investigate in what way residents might perceive communication with patients and relatives as a challenge.

Communication always occurs in a narrative context, and to gain an in-depth understanding of challenging aspects, it is necessary to identify which patterns problematize the resident-patient conversation, which makes a narrative approach relevant. This study investigates residents' narratives to gain their understandings of which patterns interrupt doctor-patient communication.

Methods: We used a qualitative narratological framework, i.e. Greimas actantial model, and analysed transcribed recordings of 138 residents' case-stories of communication situations in which they had felt challenged.

Findings: The analysis of 259 narratives from 138 residents identified an ideal template for the doctor-patient encounter, with the resident as protagonist pursuing the object of 'helping the patient with his/her health problem'. Alterations of this template are at play when challenges occur. We found two main types of challenge: 1) Challenges that originate from establishing the content of the object (e.g. patient and resident negotiating, disagreeing, or battling about what is the right kind of help), and 2) Challenges when expected helpers in the narrative (e.g. patients, relatives and colleagues) act as opponents.

Discussion: Residents' stories express an ideal template and expectation for how communication with patients and relatives should proceed, and challenges occur if there are deviations from this template. Communication situations between patients and doctors are thus complex in nature and are perceived to be so by residents, despite pre-graduate training. Communication skills training should consider this complexity and should be a part of post-graduate and continuous medical education.

## O.41.3
## The development of competencies for Shared Decision Making in postgraduate medical education using: a Delphi study

**Anouk Baghus, Maastricht University**
**Esther Giroldi, Maastricht University**
**Jean Muris, Maastricht University**
**Angelique Timmerman, Maastricht University**
**Trudy van der Weijden, Maastricht University**

Background: Shared Decision Making (SDM) is considered as the preferred approach to involve patients in medical decisions, yet is currently not routinely applied in clinical practice. This need has resulted in a proliferation of SDM training programmes, which show a high level of diversity of content and didactics, insufficient underpinning with educational theory and a lack of consistent SDM attitude and behaviours in healthcare professionals. A competency-based SDM training programme is expected to fill this gap, given the current transition of medical education towards outcome-based learning. Nonetheless, there is still a lack of consensus on SDM competencies to be trained in medical education. Therefore, our aim was to develop SDM competencies, concretised in Entrustable Professional Activities (EPAs) and associated behavioural indicators (BI) for postgraduate medical training.

Methods: We developed a list of preliminary EPAs and BIs for SDM in postgraduate medical training based on SDM literature, 17 individual semi-structured interviews with patients, healthcare professionals and experts in the field of SDM, communication and medical education (September 2016 – March 2017). To reach consensus on this preliminary list, we conducted a three round national Delphi-study (April – August 2017). Experts were asked to rate the EPAs and BIs on the following statements: "I do like to include this EPA / BI in the educational curriculum" and "This EPA / BI is applicable in clinical practice" on a 7-point Likert scale. Blanc textboxes were added for qualitative comments on the list. Agreement was specified as a median score ≥6 and ≥75% of all experts scoring ≥6.

Findings: We managed to involve all relevant stakeholders (32 experts; 97% overall response rate). Consensus was reached on the following four EPAs and 18 BIs: the resident (1) discusses the desirability for SDM with the patient; (2) discusses the available options with the patient; (3) explores the preferences, values and concerns of the patient; (4) reaches a motivated decision together with the patient.

Discussion: The list of EPAs and BIs is a first step towards an evidence-based workplace based training programme on SDM for postgraduate medical education. Future research will focus on the operationalization of this list.


## O.41.4
## The Impact of Workplace Communication on Resilience in New Graduate Veterinarians.

**Michelle McArthur, University of Adelaide**
**Martin Cake, Murdoch University**
**Sanaa Zaki, University of Sydney**
**Caroline Mansfield, Murdoch University**
**Susan Matthew, Washington State University**

Background: Communicating with clients and colleagues is central to work in healthcare settings, including veterinary practice. Accordingly, supporting the capacity for resilience in new graduates is of significant relevance to veterinary healthcare. Gaining an understanding of how workplace communication impacts on resilience for early career veterinarians can help educators and practitioners identify ways to support graduates in the transition to practice. The aim of this research was to identify the role of workplace communication in new graduate resilience. The specific research question addressed in this study was: How does workplace communication impact on resilience in new graduate veterinarians?

Methods: The study population was veterinarians who graduated from Australian veterinary schools in 2015 and 2016, and had participated in a prior survey investigating new graduate resilience as part of an international learning and teaching employability research project, VetSet2Go, funded by the Australian Government. Using a qualitative design, semi-structured interview questions were used to investigate factors influencing resilience. Thematic analysis was used to identify themes related to workplace communication.

Findings: Fifteen interviews were conducted. Themes related to client communication were most commonly reported as hindering resilience, for example non-adherence, expressing emotions and discussing finances. Themes related to colleagues were most commonly reported as strengthening resilience, for example talking through cases

with workplace colleagues. Learning communication skills and having positive client interactions also were reported as enhancing resilience.

Discussion: **Workplace communication can both help and hinder new graduate resilience. Strengthening students'** clinical communication skills could help to reshape client interactions as sources for building resilience rather than diminishing resilience. Similar expected outcomes could be realized in wider healthcare. Collaboration amongst professional bodies and veterinary schools is indicated to encourage and support initiatives that promote a culture of resilience in the transition to practice.


**O.41.5**
**Translating postgraduate communication skills training for psychiatry into clinical practice: Obstacles, opportunities, and preliminary outcomes.**

**Carmel Loughland, Hunter New England Mental Health Service - Local Health District**
**Philippa Ditton-Phare, Hunter New England Mental Health Service - Local Health District**
**Harsimrat Sandhu, Hunter New England Mental Health Service - Local Health District**
**Brian Kelly, University of Newcastle**

Background:  Despite significant investment in medical education and training, outcomes for this investment are not always realized [Thakore, 2010]. Many health facilities experience high levels of patient-reported dissatisfaction and significant unmet information needs [Loughland etal., 2015]. While effective clinical communication is central to quality healthcare and positive patient health outcomes [Cegala etal., 2000], workplace observations of clinicians reveal suboptimal communication abilities [Outram etal., 2014]. Preliminary findings for the translation of a postgraduate communication skills training program for psychiatry (ComPsych) into clinical practice is provided, along with the obstacles encountered.

METHOD:  A pilot sample of first-year psychiatry trainees (n=10) completed mandatory ComPsych training and a workplace assessment approx. 6 months post-training. To assess skill retention over time, and which skills, if any, were most utilized, trainees participated in semi-structured interview and audio recorded clinical consultations with patients in their care on a day specified by the evaluation team. Each patient completed a semi-structured interview and survey about the consultation and their experience of care. Transcripts were coded, sorted and organised using NViv [QSR International,; 2010], and themes identified and summarised. Audio recordings were blind-rated to obtain objective measures of the communication skills employed by trainees.

Findings:  Preliminary analysis revealed **retention of 'agenda setting' skills, and reduction in 'questioning' skills,** suggestive of more efficacious communication behaviours. Qualitative themes supported this finding, with trainees reporting communication behavioural changes for interview technique, time-management, and self-confidence.

Barriers identified by the researchers for undertaking translational research included the significant resources and high-level expertise required to conduct such research; inadequate sample sizes; regular rotation of trainees through clinical placements impacting follow-up; busy, dynamic workplaces not conducive to objective assessment methods; and significant health service governance support requirements.

Discussion:  Undertaking translational research in mental health care settings necessitates strong partnerships with and between clinicians, researchers, educators, and regulatory bodies if it is to be successful. This study provides first evidence for the translation of a postgraduate training program (ComPsych) into workplace practice, with trainees demonstrating behavioural change in communication practices with their patients.

# Symposia

**S.12**
**Physicians are only human. The influence of physician characteristics on their medical practice**

**Marij Hillen, Academic Medical Center - University Of Amsterdam**
**Emma Draper, Department of General Practice & Elderly Care Medicine, VU University Medical Center**
**Yves Libert, Unité de recherche en psychosomatique et en psycho-oncologie, Université Libre de Bruxelles**
**Renée Schepers, Institute of Education and Training, Academic Medical Center**
**Kiki Lombarts, Institute of Education and Training, Academic Medical Center**
**Inge Henselmans, Academic Medical Center - University Of Amsterdam**

Rationale:

In most research on quality of care, personal characteristics of physicians are not considered. However, research is accumulating on how physicians' characteristics influence their medical practice. Knowledge about the impact of such characteristics on physicians' communication specifically and the quality of their care more generally, could be used as input for physician training. In this symposium, we offer different perspectives on the relation between physician characteristics, i.e., death anxiety, reactions to uncertainty, gender and occupational well-being, and the care they provide.

Presentations

1. The relation between physicians' death anxiety and medical communication and decision-making: A systematic review

Terror management theory posits that when people are confronted with mortality, this raises fear of death, which leads to avoidance behavior. We conducted a systematic review to investigate whether physicians' death anxiety is related to their communication and decision making. The evidence was insufficient to state that death anxiety leads physicians to avoidance coping mechanisms. Our findings do suggest that death anxiety makes end-of-life communication and decision-making more difficult for physicians.

2. Predictors of physicians' communication performance in a decision-making encounter with a simulated advanced-stage cancer patient: A longitudinal study.

In this longitudinal study, predictors of 85 physicians' communication performance (CP) were investigated in a decision-making encounter with a simulated patient (SP). Their CP was calculated with validated interaction analysis systems. Physicians' CP was predicted by their decisional conflict about the SP's treatment (DCS) (p< 0.001) and their affective reactions to uncertainty regarding cancer treatments (PRU) (p=0.003). Physicians' decisional conflict and reactions to uncertainty should be addressed in communication skills training programs.

3. How physician gender and communication of uncertainty influence patients' trust and experienced uncertainty

We tested the effect of verbally and non-verbally communicating uncertainty by a male versus a female physician on patients' reported trust and perceived uncertainty. Former cancer patients (N=140) participated in an experimental video vignettes study. Physician gender did not influence trust or experienced uncertainty. Non-verbal, but not verbal, communication of uncertainty led to reduced trust and higher experienced uncertainty. More training with regard to physicians' non-verbal communication behavior is warranted.

4. A Systematic Review of the Impact of Physicians' Occupational Well-being on the Quality of Patient Care

This systematic review studied the effect of physicians' occupational well-being on the quality of patient care. We systematically searched PubMed, Embase and PsychINFO from inception until August 2014. Ultimately, 18 studies were included. Most studies reported positive associations of occupational well-being with patient satisfaction, patient adherence to treatment and interpersonal aspects of patient care. These insights may help in shaping the policies on physicians' well-being and quality of care.

Qualifications of submitters

The submitters of this symposium come from a variety of institutions and have expertise on various aspects of doctor-patient interaction and quality of care, ranging from physician-patient communication, intolerance of uncertainty, to physician professional performance. All submitters have been and are currently involved in research as well as physician education. Their various contributions to the symposium together provide a scoping overview of physician characteristics that need to be taken into account in clinical practice. By including a discussant with

particular expertise on physician performance, the last 20 minutes of the symposium can be devoted to focused discussion on questions such as whether and how physicians' personal characteristics may be addressed in physician training.

## S.13
## Returning Genetic Results and Communication about Genetic Risk in Cancer

**Nicci Bartley, The University of Sydney**
**Phyllis Butow, The University of Sydney**
**Megan Best, The University of Sydney**
**Barbara Biesecker, Research Triangle Institute**
**Kelly Ormond, Stanford University**
**April Morrow, Prince of Wales Hospital**

Genomics is gaining increasing importance in the management of cancer as it is employed to assess individual risk as well as direct personalised treatment. However, the promise of genomics will only be realised if patients are able to access, understand, and act on the information it can provide. How to effectively engage patients in the decision-making process and barriers to communication are explored in this symposium, as well as the challenges involved in for non-genetically trained clinicians.

Presenter 1 is a palliative care doctor and researcher who is managing two major cancer genomics research projects.

Young cancer patient perspectives on undertaking whole genome sequencing: A qualitative study

Whole genome sequencing (WGS) is a new clinical practice aiming to identify gene variants that increase individuals' risk of disease and guide prevention strategies. In this study, young cancer patients and their blood relatives discuss balancing individual versus relational aspects of autonomy and balancing benefit versus harm. Participants often lacked full understanding and desired lay-appropriate explanations; but they trusted the science of WGS and the research process.

Presenter 2 has conducted research on return of genetic or genomic results for more than 30 years and has specific experience with consenting participants to the return of secondary findings, returning these results and interviewing those who received them.

An exploratory study of return of secondary findings

Medically actionable pathogenic variants were identified and returned to participants and interviews were conducted. Most participants followed up with a recommended specialist and underwent evaluations. All participants communicated their results to relatives, but many were unsure whether their relatives followed up. No significant regrets or psychological harms were reported. In summary, most people receiving secondary findings benefit clinically, but not their relatives, with few psychological harms.

Presenter 3 has taught and developed curricula in genetic counselling for over 20 years.

Consent for Genetic Testing and Disclosure of Results: Shifting the Paradigm to Non-Genetics Clinicians

Historically, consent and disclosure for genetic testing results occurs utilizing a traditional genetic counselling format. We developed consent and disclosure rubrics, gathered formative data, and propose communication recommendations for the ACMG59 gene list. Our data suggest that targeted discussions with an ordering clinician will often be adequate to support patients. We propose shifting most communication towards non-genetics trained providers with referrals to genetics providers for disclosure and when cases would benefit from their expertise.

Presenter 4 is a professor of Psychology who has extensive experience conducting research and teaching students on this topic for many years.

Patient perspectives on consenting to molecular tumour profiling: A qualitative study

Molecular tumour profiling (MTP) aims to link genetic targets in tumours to therapies. This study explores participants' understanding, experiences and views regarding MTP shortly after giving consent in a semi-structured interview.

Four major themes have been developed from the data: Motivations, Managing uncertainty, It's about me, and The black box.

Presenter 5 is a cancer genetic counsellor and researcher with particular interest in improving awareness and access to genetics services.

Genomics in palliative oncology: a review

In the palliative oncology setting, genetic assessment may not impact on the patient's management but can be of vital importance to their surviving relatives. This thematic analysis of the literature Identified suboptimal genetic practices, with lack of knowledge and poor confidence amongst providers reported as barriers. Providers expressed concern about the emotional impact of initiating these discussions late in the disease trajectory, while palliative patients expressed emotional benefits.

## S.14
## Shared decision making: for what types of decisions, for which reasons, and under which circumstances?

**Eirik H. Ofstad, Department of Internal Medicine, Nordland Hospital**
**Pål Gulbrandsen, The Health Services Research Unit, Akershus University Hospital**
**Arwen H. Pieterse, Department of Biomedical Data Science, Leiden University Medical Center**
**Mary Catherine Beach, Johns Hopkins School of Medicine**
**Jennifer Gerwing, Department of Psychology, University of Victoria**

Rationale: For the past decades, shared decision-making (SDM) has been universally advocated, yet it has vastly different goals and moral underpinnings depending on circumstances. As a result, clinicians rarely fulfil the normatively pre-set criteria for SDM under any circumstances. We are trying to clear up confusion about nuances regarding involvement of patients in medical decisions and propose that different communicative acts may be required for different contexts.

Program

1. What is a medical decision? (12 minutes). This presentation synthesizes divergent research findings identifying and characterizing decision-like phenomena (decisions, treatment recommendations, proposed tasks). How these phenomena are timed and stated in clinical interactions influences the unfolding process, challenging current normative orientations.

Presenter information: For 10 years, the presenter 1 has studied clinical dialogues in hospital, primary, and emergency care. In addition, the presenter 1 brings 20 years of experience from experimental social psychology.

2. Implicit persuasion as a barrier to SDM (12 minutes). Clinicians may unwittingly steer patients towards the option they think is in their patients' best interest (i.e. implicit persuasion). Analysis of audiotaped, consecutive consultations about a preference-sensitive decision showed that patients are frequently steered towards a particular treatment options and that expected treatment benefit does not seem the driving force behind implicit persuasion.

Presenter information: The presenter 2 has studied patient and provider treatment preferences, shared decision making, and related communication behaviors in clinical practice, in survey and observational studies for the past ten years.

3. Barriers to SDM inherent in medical decision making (12 minutes). An often-unacknowledged assumption in models of SDM is equally-weighed options. Using vignettes drawn from real-life hospital encounters, hospital physicians answered to what degree equipoise is present and what communication approach they would prefer for decisions. Results show high levels of heterogeneity, revealing inherent tension between medical professionalism and patient involvement.

Presenter information: Besides working as a medical doctor for 10 years, presenter 3 has done research on clinical decision-making, how clinical decisions are communicated in patient-physician encounters and SDM.

4. Different contexts require different decision approaches (12 minutes). The rationale for involving patients in decisions shared implicitly involves several different normative goals. This presentation will re-evaluate the underlying moral nature of shared decision making, and make concrete suggestions for core communication behaviors based on a more explicit moral framework that fits different types of decisions.

Presenter information: This presenter 4 is a medical doctor and bioethicist who has spent the past 20 years studying patient-clinician communication.

5. SDM's essential element: Dialogue or sharing decisions? (12 minutes). SDM is one of the essential elements of patient-centered communication. The term "shared" may introduce confusion about agency and responsibility; there is also confusion about which decisions warrant SDM. I argue for a different term, Dialogic Decisions, framing the consultation process from beginning to end as genuinely dialogic, avoiding too much physician talk or decisions without explanations. All decisions become encompassed in a collaborative approach.

Presenter information:  After 14 years working as a general practitioner, presenter 5 has for the past two decades done health services research with a focus on communication skills training, medical decision-making and SDM.

Panel discussion with all speakers: Future directions (30 minutes):  Interactive group discussion will focus on generating ideas for moving the field of patient-physician decision making forward.

# Workshops

## W.19
**Developing a systematic review in medical communication: an interactive example using tools for undergraduate assessment**

**Teresa Pawlikowska, Royal College of the Surgeons of Ireland (RCSI)**
**Angelique Timmerman, Maastricht University**
**Katrien Bombeke, University of Antwerp**

Rationale: Communication is a core competency and its' assessment needs to ensure both robust judgments and stimulation of learning processes, requiring both the examination of psychometric qualities of instruments and the educational consequences of assessment from an edumetric perspective. A Best Evidence in Medical Education (BEME) systematic literature review was performed to identify studies that combined both approaches in applying these tools in an undergraduate medical context. This will serve as an example to engage participants actively in the workshop.

Learning objectives:

1. Provide insight in the process of conducting a systematic literature review within the area of medical communication,

2. Practice the iterative stages, informed by theoretical and research knowledge about learning communication in medical education.

Teaching methods: Introduction and goals workshop, explore participants' experiences with conducting literature searches and learning needs (10')

Short introduction of stages literature review: identification of educational need(s), formulation of research question(s), define search strings and selection of literature data bases, choose in-and exclusion criteria, and decide on the information that needs to be extracted. Participants choose the most relevant steps for their learning needs. (5')

Subgroup experiential work: for each review stage, a short assignment is given, based on the workshop leaders' BEME review as an illustrative example, e.g. for final selection of papers. Each assignment is followed by a plenary discussion of critical questions evoked. (4*15')

Presentation of 'lessons learned' during our work on the systematic review, informed by subgroup feedback, and provision of a framework of criteria for evaluating the psychometric and edumetric qualities of tools for the assessment of communication skills in the clinical consultation (8')

Wrap up of learning outcomes, using a written evaluation form and discussion of participants' intentions to stimulate transfer to educational and/ or clinical practice (10')

Evaluation of outcomes for participants: Written reflection will be carried out, enabling participants to consider underpinning theory (generic application), fuzzy boundary issues in communication (context specific) and then apply it to the development of their own review in the communication field. Examples of questions: what have you learned about conducting literature searches and which actions do you intend to undertake for your own educational practice? (Word count: 65)

## W.20
**Medical Practice and Teaching – How We See It Affects How We Do It**

**Suzanne Kurtz, College of Veterinary Medicine (Professor Emerita), Washington State University**
**Elizabeth Rider, Department of Pediatrics, Harvard Medical School**

Rationale: For decades three primary paradigms have influenced how we think about communication in both healthcare and education: Doctor Centered Care/Teacher Centered Teaching (DCC/TCT), Patient Centered Care/Learner Centered Teaching (PCC/LCT), and Relationship

Centered Care/Relationship Centered Teaching (RCC/RCT). How we think about communication and relationships significantly influences our intentions and actions. Therefore, it becomes important for us – as practitioners, educators, and researchers – to understand these paradigms and to continually examine whether we are taking full advantage of all they have to offer. Focusing primarily on PCC/LCT and RCC/RCT, this workshop provides participants with opportunities to examine their own understanding of

these paradigms, compare their perspectives with those of others, and explore how to realize the full potential of these paradigms in healthcare and education.

Learning objectives: Participants will:

- Examine and compare their understanding and perception of these paradigms.

- Explore their perspectives on how they are successfully using these paradigms and where/when they are experiencing challenges with either understanding or use

- Identify next steps for using these paradigms to their full advantage

Teaching Methods:

10 mins – Introductions, rationale, and objectives

50 mins – Small group exercise. Participants will divide into small groups; half of the groups will focus on PCC/LCT and half on RCC/RCT. Each group will respond to the following questions, summarize responses on flip charts, and report back to the large group

1. How do you define PCC or RCC (characteristics, principles, objectives, challenges)?

2. How has that paradigm influenced what you focus on, do and experience during your interactions with patients or learners?

3. How has that paradigm affected your patient's or learner's experience?

20 mins – The large group will then discuss the following:

1. What are the similarities and differences between these paradigms?

2. What benefits does each paradigm offer?

3. What next steps will you make to take full advantage of either or both paradigms

10 mins – Summary and reflection of lessons learned and next steps

Evaluation: Group discussion of lessons learned and strategies to take home. Individual written reflection, including one thing participants intend to implement from the workshop. Handouts will be provided.


**W.21**
**The teaching and assessment of triadic communication skills**

**Debbie Critoph, University of Cambridge**
**Nisha Dogra, University of Leicester**
**Andrew Ward, University of Leicester**
**Rachel Westacott, University of Leicester**
**Rachel Williams, University of Cambridge**

Rationale: Triadic communication refers to communication between a health care professional and a patient who is accompanied by a companion. It is acknowledged to be important and included with the General Medical Council's outcomes for graduates. However the literature on how triadic communication is taught and assessed is limited despite how commonly the skills are required in clinical practice.

Learning objectives:

- To identify the challenges of teaching and assessing triadic communication skills

- To experience co creating a marking schedule for an OSCE station with prepared vignette

- Or to experience co creating potential vignettes using prepared mark sheet

- Apply how the learning from the workshop might be applied at their institution and potential barriers to implementation

Teaching methods:

1. Introductions and Introduction to workshop including defining triadic communication (5 minutes)

2. Small group activity (SGA) sharing in groups of four: Whether triadic consultation is part of existing curricula and if so how/what is taught and assessed? Key points shared with wider group (15 minutes)

3. Large group activity (LGA) What should we be assessing in triadic consultations and how?(10 minutes)

4. SGA – address the challenges through critiquing a prepared vignette and devise a scoring schedule for the vignettes  OR creation of ideas for vignettes and critique of mark sheet (30 minutes) Delegates to choose activity that best suits their needs

5. Observe video of triadic communication and ask delegates to score using prepared mark sheet or the one devised by them (15 minutes)

6. Dyads – how could learning from the workshop be applied in practice at **the delegate's** institution and identify potential barriers to implementation? (10 minutes)

7. Summary and evaluation (5 minutes)

The vignettes and mark sheets produced by the small groups will be disseminated to all attendees post meeting to share the learning. Delegates will also be encouraged to share their reflections with their peers as this can help with implementing the learning once the conference is over.

Evaluation:  Written and verbal evaluation to identify:

- **Key learning point's participants have taken from the workshop.**

- An action that they intend to implement in practice, education or research.

# Works in Progress Oral Presentations

## WIP.4.1
**A serious game to help patients to learn about postoperative pain management: how to proceed after testing and first evaluation**

**Brynja Ingadottir, University of Iceland - Faculty of Nursing**
**Sigridur Zoëga, University of Iceland - Faculty of Nursing**
**Katrin Blondal, Landspitali University Hospital**
**Tiny Jaarsma, Linköping University**

Presenter: I am a clinical nurse specialist and received my Ph.D in health sciences (nursing) in 2016. The proposed study is a follow-up of my thesis.

Background: Postoperative pain management is important to promote recovery. With reduced hospital stay patients need to learn how to manage their pain. Patient education should address both insufficient knowledge and attitudes that can hinder effective pain management. Serious games are increasingly being developed and tested within healthcare. We have previously created and tested a theory-based game to help patients learn about postoperative pain management.

The overall aim of the proposed study is to evaluate the feasibility of implementing the game within the hospital environment. Our main research questions are: 1) can patients use the game to learn about pain management 2) can patients learn about postoperative pain management through playing a serious game? 3) what do patients and healthcare providers think about using a game to learn/teach about postoperative pain management? 4) what are the optimal conditions to introduce a serious game into patient preparation for surgery?

Methods: With a mixed methods design, data in the study will be collected through interviews, observation and questionnaires. Participants are patients, waiting for elective surgery at one university hospital and nurses and physicians working within surgical services. Patients (n=approximately 20) will be asked to play the game in the admission clinic and then interviewed about their experience. They will fill out a knowledge questionnaire, before and after playing the game (the questionnaire is being developed). Nurses (n=5-10) and physicians (n=5-10) will be interviewed about their perspective towards implementing the game into their preoperative preparation of patiens.

Preliminary findings: Not available.

Preliminary implications of research: First testing of the game among non-patients indicated that it has the potential to improve knowledge, skills and attitudes towards pain management. If it is feasible to implement the game into routine preparation of patients it may improve the quality of pain management and the recovery of patients.

Request for feedback: A feedback on the research plan and implementation of new interventions such as a serious game into healthcare would be appreciated.


## WIP.4.2
**Developing and testing an Online Tool to Support Older Cancer Patients: Study Protocol**

**Melanie de Looper, University of Amsterdam, ASCoR**
**Sifra Bolle, University of Amsterdam, ASCoR**
**Ellen Smets, Amsterdam Medical Center**
**Julia van Weert, University of Amsterdam, ASCoR**

Background: Because of older cancer patient's cognitive declines, recalling medical information can be hard. Offering information in different formats, such as combining interpersonal communication and (online) multimedia information might improve information recall and health related outcomes. The aim of this study is to investigate the added value of a website (the Patient Navigator) for colorectal cancer patients.

Method: This will follow the four phases of the MRC framework: development, feasibility, implementation and evaluation [1]. During the first three phases, the Patient Navigator was developed based on results of a think-aloud study regarding user experiences with comparable websites [2], pilot tested and implemented in several Dutch hospitals. Currently, in the fourth phase of the project, a randomized controlled trial (N =100) is being conducted. In the intervention condition, participants receive a link to the Patient Navigator on which they can access information

regarding colorectal cancer in general, diagnosis, treatment and aftercare. Besides, the Patient Navigator allows the patient to draw up question prompt lists to prepare for consultations. In the control condition, the patients receive the usual care. Outcome measures include patient anxiety, satisfaction with the information, patient participation during the consultation, and information recall.

Implications: This study contributes to existing literature by providing insight in how to optimize information provision for older colorectal cancer patients. This study already showed that the Patient Navigator is feasible. If results of the RCT show that the Patient Navigator is also effective in improving above mentioned health related outcomes, the results can be used to improve the quality of care for older cancer patients.

Feedback: Because in the RCT we will measure different concepts at different times, feedback regarding how to analyze such complex data would be very useful. In addition, it would be helpful to receive feedback about how to present both the extensive information of the development of the website and the outcomes of the RCT in a paper.

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**WIP.4.3**
**Interpersonal and mass media convergence in health care: From practice and theory to research design**

**Remco Sanders, University of Amsterdam, Amsterdam School of Communications Research (ASCoR)**

Background:  Cancer patients often use both mass media (e.g., health websites) and interpersonal sources (e.g., the medical expert) to gratify their (information) needs. The merging of mass media and interpersonal communication has been termed as "convergence". Both sources are often researched isolated from each other, thereby neglecting the interplay between these sources.  This project investigates, in two phases, the detection of convergence, the underlying processes, and its influence on patient outcomes.

Methods:

Phase 1: Gaining insight into online evidence of convergence

First, studying convergence starts with determining to what degree, why, and how convergence is occurring. An automated content analysis on forum posts from the largest Dutch cancer website (N=5973) will be conducted  to investigate how convergence naturally occurs as well as why patients engage in it (study 1, 2018):

1)To what extent are online forum posts  the result of exposure to interpersonal or mass media communication?

2)What specific gratification is sought after by opening a forum thread?

Phase 2: Applying convergence to the consultation

Patients often use mass media (e.g., the Internet) prior to their consultation with their medical expert. How the convergence of using both sources effects patients' fulfillment of needs and knowledge is unknown. Therefore, a role-played experiment with analogue patients  simulating a consultation, will be conducted  to get more insight in the convergence between mass media and interpersonal health information seeking and its underlying processes. By applying a 2 ( low quality vs. high quality online health information) x 2 (interpersonal communication: contradictory vs. congruent with online information) between subjects design (N=140), we aim to test the influence of convergence on needs fulfillment and knowledge.

Implications:  This research will help to detect convergence, the underlying processes of it, and its influence on patient outcomes. Thereby, the natural situation of the patient's information seeking behavior will be better understood.

Feedback: Feedback on the theoretical and practical approach to research convergence, using multiple research methods, could further advance this project. Especially, the discussion of results of study 1 (available on ICCH 2018) in relation to the experimental design is welcomed.

## WIP.4.4
## Intimate Partner Violence Awareness: Evaluation and development of campaigns tailored for victimized men

**Eduardo Reis, CIS-IUL/ISCTE-IUL**
**Patrícia Arriaga, CIS-IUL/ISCTE-IUL**
**Carla Moleiro, CIS-IUL/ISCTE-IUL**
**Xavier Hospital, UNESCO**

Background: Research regarding IPV effects on men in opposite-sex and same-sex relationships suggests similar prevalence rates and negative effects when compared to female victims. Most campaigns created for IPV awareness target female victims, and these are seen as ineffective and harmful by them. Moreover, few campaigns focused on victimized men, even though these campaigns are considered an important resource to promote help-seeking. With this project we aim to understand how victimized men view IPV campaigns, create a tailored IPV campaign and also provide empirically based recommendations for the creation of tailored campaigns that effectively promote help-seeking among victimized men.

Methods: Firstly, a qualitative review of existing pictorial campaigns targeting victimized men will be conducted by two independent reviewers. On a second study, a selected few of these campaigns will be quantitatively assessed using a sample of 120 men, independently of victim status or sexual orientation, to better understand their perceived effectiveness in facilitating help-seeking among victimized men. After this, semi-structured interviews will be conducted to better understand how self-identified victimized men perceive existing campaigns, and obtain their input on the adequate development of new campaigns. Lastly, taking into account the quantitative and qualitative findings previously obtained, we will create a pictorial IPV awareness campaign tailored for victimized men that will also be evaluated on its perceived effectiveness similarly to what is proposed before regarding previous campaigns.

Implications: Our project will provide novel contributions and guidelines for health professionals in a scarcely investigated field, ensuring a gender inclusive perspective in health communication campaigns. Following the principles of formative research, only by considering the victims' perspective can we develop tailored campaigns that facilitate help-seeking among victimized men in opposite-sex and same-sex relationships.

Feedback: Commentaries on specific theoretical concepts and methodological instruments pertaining the assessment and development of campaigns would be of great value, as it would allow for a more comprehensive overview of different paths of action, and culminate in a more adequate and rigorous methodological approach.

## WIP.4.5
## Online Behavior, Offline Consequences: How Use of a Tailored Website Influences Patient Satisfaction and Patient Participation during Cancer Consultations

**Minh Hao Nguyen, Amsterdam School of Communication Research (ASCoR), University of Amsterdam**
**Ellen Smets, Department of Medical Psychology, University of Amsterdam**
**Nadine Bol, Amsterdam School of Communication Research (ASCoR), University of Amsterdam**
**Eugène Loos, Amsterdam School of Communication Research (ASCoR), University of Amsterdam**
**Julia van Weert, Amsterdam School of Communication Research (ASCoR), University of Amsterdam**

Background: Older patients are most at risk for poor communication with providers. Medical information is expected to be better processed when interpersonal patient-provider communication is combined with additional information sources. Online information has great potential in reaching and affecting older patients, and also allows for tailoring of the 'mode of information presentation' to match individual preferences and abilities of older adults. This study investigates the effects of exposure to a mode-tailored website (offering choices between text, visuals, videos, or a combination of modes) versus a standardized website (i.e., text only, text with visuals, or text with video) on older patients' website use and website satisfaction. Furthermore, we explore how different patterns of pre-visit website use influence patient participation (i.e., question asking, concern and cue expression) during consultations.

Methods: A randomized controlled trial is being carried out to collect data from 240 newly referred colorectal cancer patients visiting a multidisciplinary outpatient clinic for fast-track diagnosis and treatment planning. Five days before their visit, patients are randomized to receive one of four website versions (tailored vs. standardized). The website contains information about the clinic, how to prepare for their visit, and disease and treatment-related information. Individual website activities are tracked with a built-in tracking tool. Patients complete an online questionnaire on background variables and website satisfaction prior to their visit. Patient participation during consultations with the physician and nurse is coded from videotaped consultations by two coders (Krippendorf's α = 0.851). The data will be analysed and ready to be presented at the conference.

Preliminary implications: Understanding how patients' use preparatory online information and how this impacts patient-provider communication, is of relevance for both health practitioners and health communication researchers.

Feedback request: As this study is one of the first that investigates the relationship between online website use and offline patient-provider communication, feedback and suggestions on our data analysis approach (i.e., how we aggregated, categorized and used the data, and interpretation of results) are welcomed. We hope this will lead to a fruitful discussion to better understand the interplay between online and offline health communication.


## WIP.4.6
## Patients' experiences with recordings of consultations throughout their entire treatment course

**Maiken Wolderslund, Department of Regional Health Research, University of Southern Denmark**
**Anne-Mette Honoré Grauslund, Health Services Research Unit, Lillebaelt Hospital**
**Jette Ammentorp, Department of Regional Health Research, University of Southern Denmark**

Background: This study contributes with an app-based audio recording feature that enables outpatient consultations to be recorded and offers patients the possibility to listen to their consultations again. The primary objective is to explore how patients experience their ability to understand and act on medical advice, take part in decisions and manage their illness when provided with access to recordings throughout their entire treatment course.

Methods: The study design is qualitative and seeks to include about 10 patients from the surgical outpatient clinic. Inclusion criteria will be: >18 years of age, more than 1 consultation at the outpatient clinic, proficiency in Danish. Patients with major cognitive deficits will be excluded. A semi-structured interview guide will be used, and patients will be interviewed between every consultation during the entire treatment course. All interviews will be transcribed verbatim and Nvivo software will be used for coding and thematic categorization of the content.

Preliminary findings – if available: Interviews will be conducted from January to April 2018. Data analysis will be completed before September making findings available for presentation at the conference in Porto.

Preliminary implications of research: Previous research has established that even a single audio recording benefit patients' understanding and recall of information, as well as patient satisfaction in general. So far the negative as well as positive aspects of offering recordings of a series of consultations have not been explored. However, it is essential to gain this knowledge prior to a decision about implementation of the recording feature in clinical practice as multiple recordings might influence the patients' experiences in a different way.

Request for feedback: We would like to get feedback on the process of transforming knowledge gained in this study into outcome measures that can be used in a cohort study where questionnaires would be the primary approach to data collection.

# Parallel Session 8

## Oral Presentations

**O.42.1**
**From observation to action: Developing and pilot-testing a brief intervention to improve the follow-up care consultations with adolescent cancer survivors.**

**Anneli V. Mellblom, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo**
**Hanne C. Lie, Department of Behavioural Sciences in Medicine, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo**
*Ellen Ruud, Department of Pediatric Medicine, Women and Children's Unit, Oslo University Hospital,* **Rikshospitalet**
**Arnstein Finset, Department of Behavioural Sciences in Medicine, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo**

Background: Childhood cancer survivors are at risk of health problems (late effects) caused by their disease and/or treatment. Follow-up care is therefore routinely offered and provides an opportunity to educate the survivors about their health risks and promote a healthy life style. However, clinicians often find it difficult to activate their adolescent patients in these consultations. Our aim was to develop a brief, focused intervention to improve the physicians' communication with adolescent patients during follow-up consultations.

Methods: We have earlier studied physician-patient communication in 66 video-recordings of follow-up consultations with adolescent cancer survivors. Based on these findings and existing literature, we developed a brief intervention focusing on improving the physician-patient communication in collaboration with experienced clinicians. The intervention aimed at improving the follow-up care consultation through enhanced structure and improved communication skills. The basis of the intervention is a list of Seven Key points:

1.  Be alone with the adolescent patient

2.  Set the agenda for the consultation

3.  Check for the patient's understanding of diagnosis and treatment

4.  Ask for potential concerns

5.  Inform about late effects

6.  Promote coping and positive lifestyle

7.  Prepare transition to adult health care

The Seven Key points was piloted in a brief, two-step training program for physicians at the department of pediatric oncology. Step 1 included a two-hour seminar about the Seven Key Points, aimed at identifying how these could be applied to meet challenges in the communication with adolescent patients. Step 2 was an individual coaching session, based on video-recordings of the physicians' own consultations.

Findings: The two-hour seminar was well attended. Due to turnover of physicians, only half of those attending the seminar attended the coaching sessions (only one physician declined coaching). During coaching, all participants reported having tried new communication skills and increased awareness of their communication style after attending the seminar. Participants indicated that observation of one's own performance on the videotape and explicit feedback from the coach was helpful.

Discussion: This bottom-up designed, brief, focused intervention seems feasible to include in the busy schedule of pediatricians. Moreover, participant satisfaction was high with its format and content.

**O.42.2**
**How do dental professionals manage triadic communication in Dental Practice? A mixed-methods study**

**Siyang Yuan, University Of Dundee**

**Gerry Humphris, University of St Andrews**
**Alastair Ross, University of Glasgow**
**Lorna Macpherson, University of Glasgow**
**Ruth Freeman, University Of Dundee**

Background:  Triadic communication with child and parent is challenging but fundamental for providing quality dental care. Little is known on how dental professionals (DPs) manage triadic communication with children and parents in primary care. The aim is to explore whether differences exist between dentists and extended duty dental nurses (EDDNs) in managing triadic consultation with children and parents and the nature of those differences.

Methods:  Fifty-one child-parent dyads, 3 dentists and 2 EDDNs participated. Video recordings were collected to directly observe how DP interacted with child and parent in the delivery of preventive dental treatment and oral health education (OHE).  Video tapes were entered into Observer XT 10.0 using a modified SABICS coding scheme for statistical analysis. The qualitative component used conversational analysis (CA) to explore the different characteristics of triadic consultations between dentists and EDDNs.

Findings:  Statistical findings show on average dentists spent 237 seconds per consultation, which is significantly less (t=7.03: $p < 0.0001$) than EDDNs' average time per consultation (937 secs).  Dentists spent less time (29.3 secs) than EDDNs (337.3 secs) in delivering oral health education (t=7.66: $p < 0.0001$). Three themes were generated from CA when comparing the triadic communication between dentists and EDDNs. They were:  [1] Question design: Dentists mostly used directive questions towards parents, while EDDNs tailored their questions into a mixture of open and closed questions depending on the receiver's needs. [2] Power differentials: Dentists managed the triadic communication in an 'institutional' manner whereas EDDNs used 'humanistic' approach to engage both child and parent in the triadic communication. [3] Oral health related topics: Dentists' messages were dentally focussed. EDDNs' topics covered a wider range of oral health/health and well-being related themes including toothbrushing demonstration and advice, healthy and sugary diets in relation to parenting and fluoride.

Discussion:  Large differences exist between dentists and EDDNs in how they communicate in triadic consultations. EDDNs are more likely to present a child and family centred approach.  Future work should develop observational methods and analytical models to investigate the effects of the different approaches in communication with the child-parental dyad on oral health outcomes.

## O.42.3
## Mothers' emotional experience and communication with their children before cochlear implant activation

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Background: The parents' experience of receiving a diagnosis for their children could be a stressful and traumatic event, especially for mothers. Many studies have shown that these mothers could display high distress (Quittner et al., 2010), dysfunctional coping strategies (Ghasempour et al., 2012) and worse communication with their children (Vanormelingen et al., 2015). However, few studies have focused their attention on comparing these factors before and after the activation of cochlear implants (CIs) in children with a diagnosis of profound bilateral sensorineural hearing loss. The aim of the study is to assess the mothers' emotional experience, the quality of their communication with their children both before and after CI activation.

Methods: Eleven mothers with deaf children before CI surgery, recruited from the 'Guglielmo da

Saliceto' Hospital in Piacenza, participated in the study, which used a multimethod approach. First, an interview was conducted, focused on the mother's experience of diagnosis. Second, mother-child interactions were observed during semi-structured activity at the hospital. Finally, the Italian version of the Parenting Stress Index (Abidin, 1983) and the Italian version of Coping orientation to the problems experienced (Carver et al., 1989) were administered in order to assess the mothers' distress and coping strategies.

Findings: Data analysis shown a correlation between emotional experience and mother's distress, specifically the mothers' anger and their negative perception of their children's behaviour [r=.757; p= .007], between lack of social support and mothers' high levels of negative emotion [r=.846; p=.001] and between elaboration of the diagnosis and realistic expectations about the child's disability [r=.667; p=.025]. Moreover, a correlation between mothers'

frequency of prohibitions during interaction and a) mothers' distress expressed [r=.637; p=.035], b) their total score of psychological stress reported [r=0.611; p=0.46].

Conclusion: The data show that both the mothers' feelings about the diagnosis and the social support received are related both to their well-being and their communication with children. Specifically, mothers' feeling about diagnosis could affect mother-child interactions. These preliminary findings could have implication for clinical practice and the implementation of supportive intervention programmes for mothers after CIs activation, focused on the direct observation of the mother-child interaction.


## O.42.4
## Stop, Look, Listen (SLL): Separating Fact from Fiction in Evaluating Child Abuse: An Interactive Tool for Pediatric Clinicians

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**Elizabeth Kachur, L A Bruell/Maimonides Medical Center**

Background:  Child abuse is a critical societal concern that requires a complex response from clinical and social welfare professionals. However, research has demonstrated that clinicians often fail to report injuries that they suspect are likely caused by child abuse. Barriers to reporting include: fear of negative outcomes for the family, uncertainty about the likelihood of abuse, and unfamiliarity with the investigative process. SLL is an interactive e-learning tool designed to increase confidence and comfort among primary care pediatric clinicians and trainees in recognizing and reporting physical child abuse. SLL follows children and families through both the clinical and investigative process, stressing inter- and intra-professional communication. Healthcare clinicians work through multiple clinical challenges in a simulated, virtual environment that is safe and enhances their ability to address this critical public health issue.

Instructional and/or assessment methods:  Using six "virtual cases," SLL takes the learner through a series of clinical encounters where physical abuse is suspected and the concomitant investigative processes. Each scenario is based on real-life cases and designed to illuminate specific areas within the general topic of child abuse.  They include: bruising, burns, fractures, and children witnessing episodes of intimate partner violence. Effective communication with other clinicians (colleagues, child abuse specialists) and collaboration with child welfare services is modeled. Pre- and post-tests allow learners to see how their choices match those of child abuse experts.

Findings:  A post-program survey indicated that 97% of the program participants described SLL as "easy to navigate," 83% said it was "constructive to compare responses," 92% would recommend SLL to a colleague, and 66% planned to make changes to their practice.

Discussion/implications:  Learners responded positively to the realistic vignettes and their relevance to actual practice.  Modeling how to elicit a trauma history, communicating in a nonjudgmental manner with parents, and collaborating with child welfare professionals contributed to an increase in confidence among learners in recognizing and reporting physical child abuse.  SLL emphasizes the need for interprofessional collaboration with the child welfare community to promote supportive relationships with patients and families and ensure the safety of children at-risk.


## O.42.5
## Using body mapping creatively to engage and communicate with adolescents in health related research

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Introduction: Communicating with adolescents in research can be difficult due to developmental issues, which can impede adolescents' ability to verbalise complex and sensitive experiences. Consequently, researchers need to think about different modes of data collection when exploring adolescent perspectives. Body maps are one example of a participatory method that can be used to engage young people in research. In this study body maps were used as a stimulus for adolescents' to communicate how their bodies had been affected by chronic kidney disease. Body maps are life-size human body images that visually tell the story of the body. The purpose of this paper is to illustrate how body mapping helped adolescents to voice their unique experiences as participants in a

narrative research study. This paper will also highlight the methodological considerations of using body mapping in research.

Methods: Five adolescents (10-17 years) participated in a study to explore adolescent embodied experiences of living with Chronic Kidney Disease. The study took place over an 18-month period in both hospital and home settings using various modes of data collection. Four of the five adolescent participants completed body maps. Body mapping involved adolescents engaging in 18 individual body mapping exercises throughout the study period to create full size body maps of their own bodies with drawings, symbols, words, and painting. These body-mapping exercises helped adolescents to relay their stories visually and verbally. Once completed, Rose's (2001) critical visual methodology framework guided analysis of the body maps.

Findings: Body mapping provided a creative and innovative approach to accessing adolescents' accounts of their bodies. Body maps helped adolescents' navigate and communicate how CKD and its treatments had changed their bodies and selves. Findings revealed adolescents bodily concerns relating to body image, mastery and control; issues that could not simply be achieved through spoken word alone.

Discussion: These findings provide healthcare professionals with insight into how body maps can help adolescents communicate complex and difficult bodily experiences. Body-mapping offers researchers and healthcare staff a novel approach to communicating with adolescents.


## O.43.1
## ABIDE Delphi: Improving information provision in Dutch memory clinics

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Background: Information given to patients and caregivers during the clinician-patient encounter varies considerably between (Dutch) memory clinic professionals. It is unclear what information patients and caregivers value most during the diagnostic process, and whether this is concordant with professionals' opinion. The aim of this Delphi-study is to identify a core set of informative topics on which patients, caregivers and health care professionals agree that these should be discussed during the diagnostic process.

Method: We performed a three-round Delphi consensus study including three panels: 1) health care professionals working in a memory clinic (HCP; N=80), 2) patients of a memory clinic (N=66) and 3) caregivers of patients (N=76). Participants rated the importance of 44 informative topics on a 1-7 Likert scale, through an online survey. Each round participants received feedback of answers during the previous round. Consensus on an item was considered achieved when an item was rated by ≥75% in each panel in the top- or bottom two scores of the Likert scale. Round 3 results are expected February 2018.

Preliminary findings: All 44 topics were rated as at least moderately important. By round 2, consensus was achieved on a total of 13 informative topics; information on diagnostic process; goal diagnostic test; reasons for not performing a test; possible outcome test; contribution test to certainty diagnosis; certainty test results; contribution test to diagnosis; results neuropsychological test; results MRI scan; diagnosis information; consequences diagnosis; next appointment; and; information about drivers' license.

Significant differences between panels also appeared. Next steps include analysis of round 3 survey results in which we additionally asked about the preferred moment of information provision and group differences based on diagnosis.

Discussion: A feasible core set of informative topics can be identified which patients, caregivers and professionals agree on to be 'very important'. Relevant group differences emerged on other topics. These results will inform a general advice for clinicians regarding the information provision during the diagnostic process in memory clinics. Aside from the core set of informative topics, the advice will be supplemented with guidance on group differences in information needs.


## O.43.2

**Co-Creation of Healthcare Communication Materials: Transforming Providers from Audience to Advisors**

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**Linda Squiers, RTI International**
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Background: We used participatory research and co-creation methods (the development of a shared body of usable knowledge between designers and their audience) with healthcare providers (HCPs) to develop communication products for the *Treating for Two* initiative. *Treating for Two* aims to identify the safest treatment options for managing common health conditions before and during pregnancy. Our primary objective was to develop an educational video that prompts HCPs who do not primarily treat pregnant women to remember that they could be "treating for two" when prescribing medication to women of reproductive age.

Methods: We conducted an in-person workshop with 9 non-OB/GYN practitioners using 2 participatory research and design activities: 1) journey mapping to identify challenges and opportunities and 2) storyboarding to brainstorm and design a solution. Each participant completed a journey map, sketching out a past situation and the steps to arrive at a treatment decision with a patient who is pregnant or considering pregnancy soon. Following this individual work, we moderated a brief discussion on their diverse experiences. We then split the participants into 2 groups and asked them to brainstorm and sketch a concept for an educational video (called storyboarding).

Findings: The participants' journey maps revealed unique perspectives, but also illuminated some shared challenges and gaps. We learned that almost all participants were receptive to the desired behavior—asking female patients of reproductive age about potential pregnancies before prescribing medications. In the storyboarding activity, participants developed thoughtful and viable concepts that spoke to different motivations. The first concept used humor to make the call-to-action "stick" in HCPs' memories, while the second concept was more fear-driven and emotional. We are now producing the first concept as a live-action video.

Discussion: While researchers can gather pieces of the participants' "journeys" through open-ended questions, we found it illuminating to have the participants sketch their experiences to facilitate recall and examine peripheral factors that affect decision-making. In addition, we believe that brainstorming solutions *with* the HCPs, rather than interpreting their comments in isolation, helped increase the final product's desirability, feasibility, and viability because it was designed for HCPs *by* HCPs.

**O.43.3**
**How can we prepare patients for their involvement in evaluation of medicines in Europe?**

**Maria Mavris, European Medicines Agency**
**Juan Garcia Burgos, European Medicines Agency**

The European Medicines Agency (EMA) is the authority in Europe responsible for evaluating the safety and efficacy of medicines for all European citizens and ensures their continued safety once marketed. EMA works with an extensive group of experts including patients and carers, who have been involved with EMA since its creation in 1995 and who have been progressively included in all phases of medicines regulation.

To ensure the best opportunity for providing input, patients (and carers) receive support and training prior to their involvement with the Agency. Training was formalised in 2007 with the launch of an Annual training day; comprising an introduction to EMA, its work and how patients are involved. Training has evolved towards a blended-learning format with an online component and face-to-face meetings and interactions.

Formal presentations have been converted to short online videos available publically and the face to face format has been adapted to hands-on sessions involving simulation of EMA procedures involving patients. Participants receive material prior to the training day along with clearly-stated objectives and tasks to complete that are detailed during an introductory webinar ahead of the day.

To date, 292 patients have been trained, representing 50 different organisations. Participants and trainers are requested to fill in an evaluation survey for the training day covering aspects on the objectives of the training day in general and impressions of each breakout session, the materials provided and the preparation. The training day is modified annually based on feedback received. Participants are also informed on how they can interact with EMA and keep abreast of activities even when medicines aren't being developed in their area.

Following training, participants have subsequently been involved in decision-making roles by joining the EMA Management Board and scientific committees and are invited to provide input on their experience in medicine development plans of medicines developers as well as being reviewing documents destined for patients. These activities serve to increase trust in the regulatory system and to enrich the regulatory decisions with the real-life experience of those affected by the conditions and their treatment.

## O.43.4
## Improving patient and staff experience of adverse event review using a novel communication- based quality improvement approach

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**Kirsty Boyd, NHS Lothian**
**Gill Highet, NHS Lothian**
**Jo Bennett, NHS Lothian**
**Jo Bennett, NHS Lothian**
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Background:  Being Open and Duty of Candour national frameworks in Scotland emphasise the importance of creating an open and honest health care environment fully involving families, when an adverse event occurs.  Here, we describe an innovative psychological approach using communication skills training to improve patient and staff experience following adverse events within maternity services NHS Lothian.  Our key aims were to:  1) develop an effective, reliable programme and processes for communicating openly with patients and families about adverse events and involving them in the review process; 2) enhance psychological safety for patients and staff to facilitate open discussion; 3) evaluate and replicate this programme.

Methods:  Our novel methodology encompassed three intersecting dimensions – engaging staff and patients in designing  scenarios for training and process improvement. A review using interviews and focus groups, elicited feedback from 33 clinical staff members and 8 patient representatives. We then developed a model of clinical communication training and conducted 10 one day team-based workshops involving 96 staff members.  In these **workshops, participants practised complex communication skills using 'real life' scenarios, guided and supported by** communication experts.  37 PDSA tests were undertaken to test the new communication processes developed in the workshops.

Findings:  By working within a clinical service, we have improved outcomes in adverse event management.  A 4 stage integrated communication and adverse event review process has been evolved. The service can demonstrate 100% reliable implementation of Being Open principles (stages 2-4) for families who have experienced a significant adverse event.  We can demonstrate sustained improved staff and patient experience. Qualitative analysis from families in follow-up interviews demonstrated that they trusted the medical team and outcome of the review. The effective implementation of this model has also resulted in positive cultural change as evidenced by enhanced team working and sustained, improved morale.

Discussion:  We have transformed the quality of communication between health care professionals and families and applied quality improvement methodology to achieve positive cultural change with staff and patients. This model will be replicated in another Scottish health board with the potential for a national roll out program.

## O.43.5
## Stakeholders` experiences of collaboration in Finnish national Medicines Information Network

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Background:  Finnish Medicines Agency Fimea launched a national Medicines Information (MI) Strategy in 2012. The primary goal of the strategy is to improve adherence to long-term therapies through improved access to MI

and coordination between parties involved in providing reliable MI to healthcare professionals and the public by 2020.

For implementation of the strategy, Fimea established a national stakeholder network. The current Network involves about 60 stakeholder organizations and the work is organized under five working groups (WG): 1) coordination 2) MI for healthcare professionals 2) MI for consumers, 4) MI education and, 5) MI research. The aim of this study was to evaluate working group members` experiences

(advantages and challenges) of the MI network after the first two years of collaboration in 2013–2015.

Methods: Individual (n=22), pair (n=11) and group (n=10) interviews were conducted among WG members (n=79) from all stakeholder organizations that had joined the MI network by 2015 representing patient organizations, universities, and professional associations in medicine, pharmacy and nursing. Interviews were tape-recorded, transcribed verbatim, and thematically content-analyzed.

Findings: Working group members identified several advantages of national networking of which increased interprofessional cooperation between MI providers was most often mentioned. Other often mentioned advantages were increased focus on developing MI nationally and recognition of MI as a contributing factor to medication safety and rational medicine use. The identified challenges were mainly related to lack of resources, especially time. It was also perceived that part of the WG members were not committed to contribute to the network, and therefore, the workload was not equally distributed. The informants gave several examples of ongoing cooperative projects and actions initiated within the network.

Discussion: National MI Network has increased national cooperation and coordination between stakeholders to increase access to reliable MI among consumers and healthcare professionals. As no other special resources than a coordinator from Fimea has been allocated to the network, limited resources were the major challenge for contributing to the MI network and implementation of the strategy. Examples of ongoing joint MI development projects under the network will be given as part of the presentation.

## O.44.1
## A database mobile app to improve intrahospital communication and satisfaction in healthcare delivery

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Background: Communication among healthcare teams is of utmost importance in patient care from a multidisciplinary perspective. However, current methods of locating the appropriate contact information can often be overwhelmingly complicated, inefficient, and sometimes inaccessible when a specific care team is needed. The aim of this study was to investigate the effectiveness of a mobile application (app) to provide contact information for the appropriate healthcare personnel or teams. The app is designed to facilitate communication between medical teams and improve their satisfaction in coordinating patient care.

Methods: This study was a prospective, non-randomized, non-blinded trial to evaluate overall satisfaction of coordinating patient care by efficiently locating the appropriate contact information of health care teams through a mobile app. Pertinent contacts include: numbers for nursing floors, intensive care units, multidisciplinary consult lines, and a resident/faculty directory. A pre-app implementation survey was conducted with faculty and residents from the academic internal medicine residency (n=13) to obtain set of pre-intervention satisfaction data. The survey assessed the satisfaction score with regards to 1) current means of locating contacts, 2) availability of contacts, 3) efficiency in contacting other services, and 4) coordination of patient care. The score was determined by the Likert-style scale which ranged from Strongly Disagree (1) to Strongly Agree (5). The app was then distributed and implemented for 3 months, followed by a post-intervention survey conducted on the same cohort for direct comparison of satisfaction scores.

Preliminary Findings: After a 3-month implementation trial of the mobile app, preliminary results have been highly favorable. All survey participants (n=13) had used the pilot app with an overall increase in satisfaction with regards to locating contact information, communication efficiency, availability of contact information, and coordination of patient care.

Discussion: Following the piloting phase, preliminary results suggest that the use of a dedicated directory app to be a viable tool to promote better communication between healthcare teams, particularly the satisfaction and

efficiency of coordinating patient care. However, the app will require further testing and implementation outside of the internal medicine residency teams to better integrate into the current intrahospital communication system.

## O.44.2
## Driving Health: Using mHealth to Improve Taxi Driver Health Care Uptake

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**Bharat Narang, Memorial Sloan Kettering Cancer Center**
**Anuradha Hashemi, Memorial Sloan Kettering Cancer Center**
**Nicole Roberts, Memorial Sloan Kettering Cancer Center**
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**Julia Ramirez, Memorial Sloan Kettering Cancer Center**
**Abraham Aragones, Memorial Sloan Kettering Cancer Center**
**Jennifer Leng, Memorial Sloan Kettering Cancer Center**

Background: There are over 300,000 taxi drivers in the U.S. They face significant health disparities, including obesity/overweight, early cardiovascular disease, and increased cancer risk. These are due to the sedentary nature of their jobs, lack of easy healthy food access, stress, and poor health care access. However, taxi drivers are also linked to their cell phones, and text message frequently. This study examined the potential of an mHealth intervention to improve access to health care and wellness behaviors in this large, at-risk population.

Methods: This was a 12 month 3-arm group(garage)-clustered randomized controlled trial(RCT) comparing the impact of: 1)health fairs (BP, glucose, lipids, BMI, waist circumference, health access navigation) versus 2) mHealth(health fair + daily text messages), versus 3) health fair + professional navigation on PCP uptake(primary outcome), and changes in reported exercise/nutrition behaviors(secondary outcomes). Drivers without a usual source of health care, who had not seen a PCP in over a year, were randomized across 30 garages. Data were collected by bilingual staff via a tablet using the RedCap database. A text message library was developed and piloted with the input of a Taxi Community Advisory Board(CAB).

Findings: Data on the 168 participants revealed that the mHealth intervention arm achieved a PCP uptake rate(48%), with no statistically significant difference in uptake across the arms( Arm 1(44%), Arm 2(60%)). Participants reported greatest satisfaction with the mHealth arm.

Discussion: In this at-risk population with no prior health care uptake in the past year, an mHealth intervention led to an important increase in health care utilization, similar to rates seen in the health fair and in the professional navigation arms. mHealth interventions have the potential for widespread dissemination among the large and growing driver populations, and represent a potentially low cost impactful health communication intervention.

## O.44.3
## Facebook as a communication tool and support for the participatory diagnosis applied to health

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Background: Participatory Diagnosis (PD) is a strategy of social participation applied to public policies planning and implementation, being a method for collective acquisition and construction of data. Obtaining information from the residents of a community allows identifying their needs and prioritizing improvement strategies. Facebook can be a strong ally for PD, acting as a communication tool between health professionals and community. The objective was to develop and evaluate a Facebook page to increase the involvement of residents of a socially vulnerable community in the PD process, favoring the identification of problems that interfere in health conditions and the search for solutions.

Methods: A participatory research was carried out, from October 2017 to January 2018, with 31 residents of Dendê community, Fortaleza-Ceará-Brazil. In the first step, videos on PD were elaborated to be published on the community's Facebook; in the second step, the Facebook page was developed to support and broaden popular participation in understanding and seeking solutions to problems related to the community's health; at last, the FanPage 'Dendê Participa' was released to the community. Data analysis was based on participatory diagnosis and social media theories related to the health area.

Findings: Five videos were developed on: 'PD mening', 'objectives and requirements for PD use', 'importance of PD for the community', 'PD benefits for health' and 'Fortaleza Participa Portal (a tool for social participation and digital democracy) disclosure. Videos were presented to the residents who participated in the creation of FanPage 'Dendê Participa' and to the community leaders, who evaluated them as informative, clear and necessary to instruct the community about the importance of their participation in the search for solutions to problems that interfere in health conditions. The FanPage is seen by residents as a space that enhances popular participation in the conception, debate and collective development of ideas, actions and projects of social interest, stimulating the local articulation of people and groups.

Discussion: The use of Facebook in the context of PD in health presents many benefits, highlighting the facilitation of communication between community and health professionals and also the development of solutions to the identified problems.


## O.44.4
## Medical apps for teenagers with type 1 diabetes: Supporting patients' decision-making?

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Mobile health (mHealth) technologies, such as apps, are often touted as empowering their users by complementing the care and advice provided by healthcare practitioners, and helping them make healthcare decisions. However, **apps can affect users' healthcare decisions both positively and nega**tively (Abbasgholizadeh Rahimi et al., 2017). The **aim of this paper is to explore how a medical diabetes app, Diapplo, affected teenagers' decision**-making regarding diabetes management.

Our analysis derives from a qualitative in-depth case study of the development and use of a medical app at two outpatient clinics in Denmark from October 2016 to December 2017 (Stake, 2005). The app was developed through collaboration between users, health professionals and IT designers using an action research approach to support teenagers with type 1 diabetes. The app was tested by users and health professionals at two outpatient clinics. Data comprise transcripts from meetings and workshops (15), interviews with the teenagers (5), observations in consultations (6), and material developed for inclusion in the app. The data were analysed using qualitative content analysis (Graneheim and Lundman, 2004) and contextually interpreted (Abma and Stake, 2014).

**Analysis indicates that the teenagers' decision**-making needs were not fully met in the app for several reasons. The **teenagers considered some of the app's functions and information unnecessary and found that it lacked other** features. Teenagers rarely used the app to seek medical information about diabetes to support their decision-making; they wanted a private space in the app to chat with other diabetics, and did not see benefits in using the app to track blood glucose levels. Instead, interacting with peers about everyday life decisions and events without focusing on biological aspects of the disease were prioritised.

Inspired by theories of shared decision-making and patient engagement, we discuss the consequences of using medical apps to involve teenagers with a chronic disease in making health-related decisions, particularly given our **findings, which highlighted the impact of the app's functionalities. With the ongoing digitalization of healthcare via** mHealth technologies and the importance attached to patient participation, further attention needs to be paid to identifying **how health apps can best support patients' decision**-making.


## O.44.5

**Patient and provider perspectives on an innovative mobile health intervention for people living with HIV**

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**Logan Baker, University Of Virginia**
**Marika Grabowski, University Of Virginia**
**Ava Lena Waldman, University Of Virginia**
**Karen Ingersoll, University Of Virginia**
**Rebecca Dillingham, University Of Virginia**

Background: Patients living with HIV (PLWH) require excellent adherence and retention in care to reduce morbidity and mortality.  Mobile health technologies can help patients overcome challenges in care access and self-management.  We designed a custom smartphone app (PositiveLinks) for PLWH and analyzed patient and provider perspectives on the program.

Methods: The first phase of PositiveLinks included daily queries of medication adherence, mood and stress, appointment reminders, resources, and a community message board.  Pilot patients demonstrated improved retention in care and viral suppression.  The second phase (PositiveLinks Plus [PLP]) added private messaging through the app with providers and a provider portal to view patients' query responses.  Patients installed the PLP app at enrollment and completed usability interviews after 3 weeks.  Providers completed surveys at 3 months and end-of-study interviews.  Data were analyzed with descriptive statistics and qualitative assessment of open-ended responses.

Findings: The PLP study enrolled 87 patients and 27 providers.  For patients, 63% were male, 48% Black non-Hispanic, and 62% had completed high school or less.  42% used the app daily and 36% multiple times a day.  The most used features were multiple (28%), reminders (18%), and community message board (18%).  Improved connection to HIV care was reported by 60% and improved communication with providers by 40%.  Patients valued the ability to communicate with providers between clinic visits and felt more motivated to stay in care.  Providers included primary HIV clinicians, mental health clinicians, case managers, nurses, and other clinic staff.  For providers, the most used features were medication adherence tracking (41%), private messaging (29%), and mood/stress tracking (24%).  Providers valued identifying patients with adherence or mental health needs and addressing problems early, contact with hard-to-reach patients, and communicating more efficiently and effectively.  Barriers were difficulty matching user names with medical records and logging in to the provider portal.

Discussion: This clinic-based mobile health intervention improved patient connection to care, timely identification of adherence or mental health problems, and care coordination, especially for hard-to-reach patients.  Barriers to provider portal use will be addressed through design of a provider app.  Next steps include longitudinal follow-up of PLP patient outcomes.

**O.45.1**
**An Electronic Health Record-Enabled Universal Medication Schedule to Promote Adherence**

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**Amisha Wallia, Northwestern University**
**Lauren Opsasnick, Northwestern University**
**Scott Hur, Northwestern University**
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Background:  Many patients misunderstand prescription medication (Rx) instructions; this has been linked to medication errors, adverse drug events and poor adherence. We collaborated with U.S. community health centers and a pharmacy chain to impart a health literacy 'best practice' – the Universal Medication Schedule (UMS) – via electronic health record (EHR) and mobile technologies to better convey dosing instructions and help organize multi-drug regimens among patients with type 2 diabetes.

Methods:  Prescribing clinicians were randomized to usual care or one of two intervention arms:

UMS:  Patients received 1) UMS Rx instructions that guided patients to take their medication at 4 standard time intervals (morning, noon, evening, bedtime); 2) a one page, plain language medication information sheet was

generated; 3) a **complete list of patients' current medications mapped to** UMS intervals was generated to help patients consolidate their entire regimen to the 4 standard intervals.

UMS+SMS: Patients were exposed to the UMS tools, but also received SMS text reminders to their mobile phone about when to take medicines based on UMS intervals.

452 English and Spanish-speaking patients with type 2 diabetes who were prescribed 3+ medications and could receive text messages were assessed at baseline, 3 and 6 months. Outcomes included Rx knowledge and regimen adherence (pill count, self-report, pharmacy records).

Findings: In multivariable analyses, no significant differences in any outcomes were found by study arm at baseline. By six months, patients receiving the UMS+SMS intervention were more adherent to their regimen according to pharmacy records (Adjusted Odds Ratio (AOR) 4.67, 95% Confidence Interval (CI) 3.56-6.13, p <0.001), pill count (AOR 1.23, 95% CI 1.08-1.39, p <0.001) and self-report (AOR 1.40, 95% CI 1.01-1.83, p=0.04) and had greater Rx knowledge (AOR 2.02, 95% CI 1.14-3.60, p=0.02).

Discussion: Our trial found that embedding a health literacy best practice to more clearly guide patients on when to take all of their medicine in a standard manner significantly improved knowledge and adherence to prescribed regimens. The added benefit of reinforcing when to take medicine via text reminders was also evident. Our EHR and SMS text UMS tools are low cost and highly scalable strategies.

## O.45.2
## Assessment of patient information needs: A systematic review of measures

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Introduction: Providing information according to patients individual needs shows positive effects in many studies (e.g. higher adherence and quality of life). Nonetheless, patients often get less information than they desire. As information needs vary individually, psychometric sound measurements offer an efficient possibility to assess them and to tailor the communication accordingly. The objective of this study was to give a systematic overview over measures on information needs of patients as well as the quality of their psychometric studies and characteristics.

Methods: We conducted a systematic search in the electronic databases Embase and PubMed to retrieve psychometric studies of measures on patient information needs. Two independent researchers carried out screening of records and assessment of eligible full texts. Details on the included measures and their psychometric characteristics were extracted. Additionally, we evaluated the quality of the psychometric studies according to the consensus-based standards for the selection of health measurement instruments (COSMIN) as well as the quality of the measurements according to Terwee and colleagues. This systematic review was registered in the International prospective register of systematic reviews (PROSPERO, registry-number: CRD42014012867).

Findings: We identified 24 studies on 21 measurements. The measures mostly assessed information needs of patients with cancer (n=10) or cardiovascular diseases (n=5). While the majority of studies were conducted in Europe (n=13), there were also instruments from China, Korea and Brazil. The quality of the psychometric studies was mostly rated "poor" or "fair". The rating of the psychometric quality of the measures showed that for most psychometric characteristics there was no information available or they were rated "intermediate".

Conclusions: This systematic review showed that many measures on information needs exist. The overview can be used by researchers and clinicians to choose a measure e.g. for the evaluation of communication interventions or for tailoring communication according to individual needs. The results encourage a more thorough psychometric evaluation of information needs measures. Also, no instruments were found for frequent groups of chronic diseases (e.g. diabetes).

## O.45.4
## Communication Strategies Used to Discuss Online Information

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Background. Patients' online information seeking changes the dynamic within the consultation and thereby the communication. This study aims to explore how patients and providers communicate about online information. This exploration makes a unique contribution to the literature from multiple angles; 1) no research has yet explored if and how providers initiate the discussion about online information, and 2) studies in this field have mostly relied on retrospectively, self-reported data. By analyzing videotapes of consultations, a more accurate insight can be provided.

Method. This study focusses on the discussion of online information at the start of chronic patients' maintenance treatment. In total, 165 consultations were videotaped and transcribed. If (any combination of) the words Internet, Google(d) or any other related words were mentioned by either the patient or the provider, the consultation was included in the qualitative analysis. Literature was used throughout the analyzing process. For all transcripts the following aspects were coded: 1) initiator of the discussion; 2) communication strategy used to initiate the discussion; 3) response to the introduction.

Results. Patients and providers equally initiated the discussion of online information. The valence of initiation was generally neutral. Patients often expressed concerns about the reliability of the online information. Providers frequently used a warning when initiating a discussion about online information. When patients responded to the providers' initiation, they usually tried to validate their efforts. When providers responded to patients' initiation, they used patients' online information as a springboard to guide their consultation or to validate patients' search efforts. Overall, providers did not discuss online information in-depth; providing evaluation tools, or referring the patient to high quality websites, was rarely found in our data.

Conclusion. This study advanced our understanding of how patients and providers talk about online information. Both patients and providers initiated generally neutral discussions and it seems that talking about the Internet is often integrated in consultations. Given that patient exposure to inaccurate online information is likely, it is vital that providers talk more in-depth about online information. Results of this study could guide communication interventions developed for providers to assist them in talking about online information.

## O.45.5
## The Impact of Nurse-Patient Direct-to-Consumer Advertising Communication on Healthcare Outcomes

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Background: This study is the first to test empirically advanced practice nurse prescribers' views of the effects of direct-to-consumer advertising (DTCA) communication during an office visit on the healthcare efficiency, quality of care, and patient health outcomes. Further, it examines nurse prescribers' views of the advantages and disadvantages of DTCA.

Methods: A cross-sectional mail and online mixed-mode survey design was used to survey nurse prescribers in a single U.S. Midwestern state. Of the 1,163 surveys that were delivered, 301 were returned by mail and 56 were completed online for a total of 357, generating a response rate of 30.70%. After excluding unusable surveys, the final study consisted of 316 participants for a usable response rate of 27.17%. A pre-established survey instrument was used. Descriptive statistics analysis, Pearson's chi-squared analysis and multiple/multinomial logistic regression analyses were used. Findings: Nurses agreed that, in general, DTCA drove up the costs of prescription drugs (80%); limited patient's willingness to consider lifestyle changes (60%); and there should be stricter guidelines (67%). In terms of effects on nurses, there was a general disagreement that DTCA interfered with good nurse-patient relationships (50%) and biased patients in favor of physicians over nurses (44%). In terms of DTCA effects on patients, nurses agreed that DTCA alerted patients to new therapies (71%); gave patients confidence to talk to nurses (54%); and promoted increased nurse-patient communications (43%). Worsened quality of care was associated with factors, such as challenged prescriptive authority, worsened nurse-patient relationship, not having enough time to discuss advertising information, and the patient not taking responsibility for their health. Worsened efficiency of care was associated with worsened nurse-patient relationship and the increase of drug advertisements. Finally, worsened health outcomes were associated with irrelevant advertising information and worsened nurse-patient relationship.

Discussion: Study has implications for providing nurse prescribers with health literacy training as well as training in negotiation skills development. Nurses should also communicate and engage with patients in ways that best fit

their needs, preferences, and lifestyles in order to develop strong patient-provider relationships, which in turn would foster improved efficiency of care, quality of care and patient health outcomes.


## O.46.1
## Empowerment, Motivation and Medical Adherence (EMMA): Results of an RCT in People with Diabetes T2

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Background:  Many studies have shown that substantial improvement of glycemic control is difficult in people with poor glycemic control. Knowledge, competences and motivation are critical requirements for optimal self-management and good glycemic control. The aim of this RCT was to test if a consultation program, EMMA could improve self-management and glycemic control in people with T2D and poor glycemic control compared to a control group receiving usual care.

Methods:  The study was a non-blinded parallel RCT targeting adults with T2D ≥ 1 year and HbA1c ≥ 64 mmol/mol in a Danish diabetes clinic.

The intervention consisted of four consultations with nurses using EMMA, which provides a person-centered approach using dialogue tools designed to promote self-reflection, learning and goal-setting (3.5 months).

Outcome measures were HbA1c and questionnaire scores investigating determinants of glycemic control according to Self-Determination Theory, such as autonomy support (Health Care Climate Questionnaire (HCCQ)). Consultation processes were evaluated by the level of nurse talk and the actual use of the tools.

Results:  Nighty-seven participants completed the study (49 in the intervention group). The HCCQ score was significantly higher in the intervention group at end of the intervention. The increase in HCCQ score was not sustained at the end of follow-up (6 months). HbA1c was slightly reduced in both groups at the end of intervention and at follow-up.

Average level of nurse talk in all recorded intervention consultations (n=57) was 37% of total talk-time.

Records from the consultations showed that most of the reflection and goal-setting tools were used with >90 % of the participants, whereas the learning tools were used with 61%.

Discussion:  The initial increase in autonomy support seemed attributed to the intervention. The use of dialogue tools may have contributed to enhanced involvement of participants and delivery of autonomy support, but further research is needed on how to optimize the process and content of patient-provider communication in order to also, eventually, improve glycemic control substantially.


## O.46.2
## Health and social burden in people with type 1 and type 2 diabetes, and informal carers, in Portugal

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Background and aims: The type of relationship and communication that people with diabetes (PWD) establish with family members (FMs) and health care professionals (HCP) is fundamental for therapeutic success. The aim of this study was to assess and explore potential drivers of active and successful management of diabetes among PWD and FMs.

Material and methods: In Portugal, the DAWN2-Attitudes, Wishes and Needs, included 89 with Type 1 diabetes (T1D) and 328 with Type 2 diabetes (T2D), those with Type 2 diabetes were stratified by treatment (170 non-insulin

medication and 158 insulin treated) and 123 family members. Surveys assessed health-related quality of life, self-management, attitudes/beliefs, social support and priorities for improving diabetes care.

Results: Many PWD are reluctant to ask others for support or to even let people know how they can best support them in managing their diabetes (T2-72%;T1D-52%).

Related with the relationship with HCT, the PWD refer they were helped, most of the time, to set specific goals to improve diabetes management (T1D-62%; T2D-38%) and to make plans to achieve their diabetes care goals (T1D-64%;T2D-38%).They consider the HCT conveyed confidence in their ability to make changes (T1D-70%;T2D-49%).

T1D are more likely than T2D to have someone other than a HCP involved in helping their diabetes management (T1D-73%;T2D-55%). The vast majority say they get about the right level of involvement from the person most involved in their care (T2-72%;T1D-52%).

At least one in ten FMs (14%-31%) would like to be more involved in the diabetes care of the person they live with and would like to be more involved in helping him/her to deal with feelings about diabetes.

Discussion: This study underlines the mental/emotional and social burden felt by people with diabetes. These report to find support mainly with family and healthcare professionals, while being reluctant to ask other people for help, or engage in activities with peers. Finally, informal carers also report considerable burden from disease management, although some declare they would like to be more involved. Communication between PWD, FMs and HCP should be structured and promoted

## O.46.3
## It takes 2 to self-manage:
## View on nurses' self-management supportive behaviour

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Background: Supporting persons with a chronic illness to take an active role in condition management requires a partnership between patient and nurse. Nurses are challenged to provide support tailored to patients' preferences in balance with treatment goals.

Methods: Multi-centre study to explore self-perceived behaviour of supporting patients' self-management by nurses and final-year nursing students, and its association with person-related and structural factors. Self-management support (SMS) was measured by the psychometric sound SEPSS-36 instrument.

Findings: Both, nurses (N=477) and final-year nursing students (N=256) scored overall low on self-management principles such as collaborative goalsetting, shared decision making and organizing follow-up. Selfmanagement support primarily consisted of informing, the lowest level of patient participation. This study demonstrated the added value of within-person variables such as self-efficacy and positive beliefs; and structural factors, such as supervisor support and training, on nurses' behaviour in SMS.

Discussion: This study indicated nursing still has a way to go in aspects of patients' participation in chronic condition management. A broad view on SMS should be more prominent in nursing care and curricula. The complexity of SMS seems to require some level of advancement, obtainable by training or education. Cross-national studies could be of future interest.

## O.46.4
## Parents' Views on the Challenges of Discussing Type 1 Diabetes Self-Management with Adolescents

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Introduction: Adolescence is a key time in which young people take on increasing levels of responsibility for their type 1 diabetes (T1D) self-management. Parents hold an instrumental role in facilitating a safe learning

environment and motivating adolescents to monitor blood glucose levels in order to attain optimal glycaemic control. Challenges in the sharing of self-management responsibilities between parents and adolescents can result in ineffective communication and negotiation strategies which can impact negatively on adolescents' T1D self-management. This study aimed to describe how parents communicate and negotiate self-management responsibilities with adolescents with T1D; including factors that enable or hinder effective communication.

Methods: Qualitative interviews were conducted with 32 parents (24 mothers, 8 fathers) of adolescents (11-17 years) living with T1D to explore the process of how parents communicate about T1D self-management responsibilities with their children. Parents were recruited through two national child and adolescent diabetes and endocrine clinics and online advertisement through a national diabetes advocacy organisation. Interview data were transcribed verbatim and thematically analysed.

Findings: Parents reported talking with their children about T1D related tasks daily due to the constant monitoring and adjustment required to achieve blood glucose targets. Parents communicated self-management responsibilities to adolescents in a number of ways ranging from regular reminders to less frequent in-depth discussions. Parents discussed both personal (e.g. mood) and situational (e.g. presence of others) factors that act as barriers and/or facilitators to effective communication. Parents discussed strategies they employed when talking about T1D self-management (e.g. having a positive outlook) but noted that adolescents' reluctance to discuss T1D, a lack of openness about T1D self-management, and poor glycaemic control were significant barriers to communication.

Discussion: These findings provide insight into the challenges parents face when negotiating self-management responsibilities for T1D with their adolescent children. Understanding factors that enable and/or hinder effective communication about self-management between parents and adolescents living with T1D will enable healthcare professionals to provide more effective support to families as parent and adolescent roles change over time. Identifying areas for intervention to improve parent-adolescent communication and support the transition of responsibilities for T1D self-management may subsequently improve long-term outcomes for adolescents.


## O.46.5
## Preparation for the consultation: Development and Testing of a Question Prompt List for Patients with Type 2 Diabetes.

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Background: A question prompt list (QPL) is a structured list of questions reminding patients about relevant questions to pose to their health care provider, aimed to promote more patient participation in consultations, to calibrate consultations more to patients' individual concerns and to enhance patient satisfaction. QPLs have mostly been used in cancer care, and have not been tested in diabetes consultations. In the present pilot intervention study, we constructed a QPL for patients with Type 2 Diabetes (T2D) and tested the effect of a QPL intervention on question asking, physiological activation and patient satisfaction in arranged consultations with patients with T2D. The study is the first to investigate the effects of a QPL on psychophysiological activation.

Method: A QPL was designed based on existing cancer QPLs and revised after consultation with a diabetes expert and focus group interviews with patients. Twenty-six patients with T2D of both sexes, age 50-80, were recruited through the Diabetes Association in Norway to participate in arranged consultations with last year medical students. The Intervention group patients (N=13) were given the QPS, while the control group (N=13) filled in a dummy questionnaire. Both groups received a patient satisfaction questionnaire after the consultation. Blood pressure, heart rate and electrodermal activity before and during the consultation were recorded. All consultations were video recorded, and communication behavior was coded and analyzed.

Results: A highly significant difference between the groups was seen in number of questions asked by patients during the consultation, with a mean of less than 1 in the control group and 4 in the intervention group. Preliminary analyses showed moderate increase in electrodermal activation over time in the intervention group, indicating a higher psychological activation level. Among younger patients (<65 years), satisfaction was lower in the no-QPL condition (the control group), but no between-group differences were found among older patients.

Conclusion: A QPL may promote patient activation and participation in consultations with patients with T2D, primarily in terms of increased question asking, potentially also associated with increased psychophysiological activation and higher patient satisfaction. The intervention should be tested in a larger sample in diabetes care.

## O.47.1
### Development and evaluation of a patient-centered measurement tool for surgeons' non-technical skills

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Background: Patient-centered safety initiatives aimed at involving patients in decisions about care, and focusing on outcomes that are important to patients as well as clinicians are increasingly being adopted in surgery. Non-technical skills are essential for safe and effective performance in the operating room. Several tools to assess surgeons' non-technical skills have been developed, however a reliable means of measuring surgeons' non-technical skills using a patient-centered lens does not currently exist.

Methods: A mixed-methods research design was used to develop a patient-centered assessment tool called Patients' Evaluation of Non-Technical Skills (PENTS). We gathered data from four cohorts of patients (total n= 534) using an iterative process in order to create a valid and reliable scale that was phrased in patients' vernacular. Exploratory and confirmatory factor analyses were performed to establish the psychometric properties of the scale, focusing on validity, reliability, usability and parsimony.

Results: A total of 24 survey items were developed in stage 1, and reduced to 9 items in stage 2 using exploratory factor analysis. In stage 3, confirmatory factor analysis demonstrated that these nine items each loaded onto one of three factors: Decision making, Leadership, and Teamwork with high face validity and excellent internal consistency. In stage 4, discriminant validity tests established that PENTS was independent of physician empathy and predictive validity analysis demonstrated that PENTS was an independent predictor of quality. Throughout scale development, surgical leadership emerged as the most dominant skill that patients could recognize and evaluate.

Conclusions: We developed a novel assessment tool consisting of 9 items that for the first time allows patients to evaluate surgeons' non-technical skills. This tool fills a gap in the patient satisfaction domain as it allows an aspect of surgeons' skill to be evaluated as opposed to relying on proxy measures. Despite recent modifications, satisfaction metrics such as the NHS Inpatient

Survey (UK) and the Hospital Consumer Assessment of Healthcare Providers and Systems

(HCAHPS) survey (USA) do not specifically address the unique experience of surgical patients17. Questions addressing communication restrict focus to doctor-patient relationship, and do not address the surgeon's interactions with other members of the clinical team.


## O.47.2
### Facilitating shared decision making about breast reconstruction: the development of a decision aid

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Background: Women with breast cancer who are treated with mastectomy can choose to restore their breast shape with a breast reconstruction (BR). BR can be done in multiple ways. The 'best' choice depends largely on patients' preferences. The choice for breast reconstruction should be made well-informed and in a process of shared decision making. To support this, we aimed to develop an online decision aid (DA) for women considering BR.

Methods: The development consisted of four phases. We first established a national working group of experts in decision-making about BR and web developers. Secondly, we performed a needs assessment among patients and healthcare professionals. We conducted semi-structured interviews with 17 women who had considered BR, and invited 44 healthcare professionals involved in decision-making about BR to complete a study-specific questionnaire. In the third phase, the content and the technical system were created. In the final phase, we tested usability and acceptance of the first version of the DA. We performed think-aloud procedures with 7 patients and interviewed 7 healthcare professionals who had reviewed the DA.

Findings: Patients expressed a need for a reliable overview of reconstructive options, experiences of other women, and more information about what they could expect from breast reconstruction. Professionals (N=31, RR=70%) varied in their levels of satisfaction with available information about breast reconstruction and had positive attitudes towards shared decision making. Guided by these results, the content and the technical system were created and reviewed by members of the working group. Overall, patients and healthcare professionals were positive about the DA: they perceived it as easy to use and informative. Based on received feedback, we made minor adjustments.

Discussion: In line with needs of patients and healthcare professionals, we developed an online DA to support women in making a well-informed decision about breast reconstruction together with their physician. The first experiences with the DA are positive. The actual impact of the DA on the decision-making process is currently being investigated in a randomized controlled trial.

## O.47.3
### Prioritizing medicines in older people with polypharmacy: development and feasibility of a tool to support communication about goals and preferences

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Background: Medicines reviews can reduce inappropriate and/or harmful medicines in older people with multimorbidity, however studies identified lack of involvement of older people in this process. We developed a Conversation Guide that aims to increase involvement of older people in decisions related to polypharmacy, and support discussions about their goals and preferences. This study describes the development and feasibility testing of the Guide in the context of a Home Medicines Review (HMR) with pharmacists.

Methods: The 1-page Guide was developed iteratively and key elements include: general health understanding, decision-making and information preferences, health priorities related to medicines, patient goals and fears, views on important activities and trade-offs.

We evaluated the feasibility and acceptability of the Guide in 17 HMRs. Participants included 11 pharmacists, 17 of their patients (aged 65+, taking 5 or more medicines) and companions. A researcher observed the HMRs and interviewed all participants afterwards. Transcribed audio-recordings of the interviews were thematically coded and a Framework Analysis method used.

Findings: The Guide was found to be an acceptable and useful addition to the HMR and seemed to increase patient **involvement by focusing on the patient's perspective in a structured format. Implementa**tion of the Guide was affected by how pharmacists differed in their approach to HMRs: some conducted more patient-centred reviews while others were more medicines-focused and structured in their style. This suggests that to optimize successful implementation of the Guide, strategies need to be tailored specifically to the pharmacist types e.g. medicines-focused pharmacists needed support to integrate the Guide with their usual (structured) HMR and could benefit from training in open-ended communication. Patients were positive about the Guide, however not all questions were relevant for all patients and several found it hard to understand concepts related to quality of life and making trade-offs between benefits and harms of medicines.

Discussion: Patient involvement in decision-making about medicines is complex. Our findings suggest it's beneficial to guide clinicians to increase patient involvement and incorporate patient goals and preferences into the HMR. We recommend providing more training in how to use the Guide with specific consideration of the pharmacist's communication style.

## O.47.4
## Revolutionizing Informed Consent Law and Practice: Empowering Patients with Certified Decision Aids

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Background: A giant chasm lies between the theory and the practice of informed consent. On the one hand, in terms of theory, scores of appellate court opinions and medical ethics codes describe informed consent in terms of honoring and supporting patient autonomy and self-determination. On the other hand, in terms of practice, this laudable goal is rarely actually achieved.

The doctrine of informed consent has been a part of U.S. law for decades. But it has failed to meaningfully empower patients to make diagnostic and treatment decisions that match their preferences. Too frequently, clinicians fail to appropriately elicit their patients' preferences. Too frequently, the interventions that clinicians administer are unwanted by the patients who receive them.

Methods: A systematic search was conducted across medical and legal databases for:

- Empirical research on PDA effectiveness

- Federal policy on PDA certification

- Implementation of PDA certification in Washington State

Findings: Policymakers are building a new "bridge" to narrow the persistent gap between the theory and practice of informed consent. That bridge is being built with patient decision aids (PDAs). These evidence-based educational tools include decision grids, videos, and interactive websites. Already, over 130 randomized controlled studies show that PDAs help patients gain significant knowledge and understanding of their choices.

The evidence on PDA effectiveness is substantial. But their use remains mostly limited to investigational trials. Taking the lead on the challenge of moving PDAs from research to practice, Washington State has begun "certifying" PDAs. The U.S. federal government is also exploring PDA certification.

Discussion: Certification incentivizes PDA use by assuring clinicians, patients, and payers that the information is accurate, up-to-date, complete, and understandable. Washington State serves as a model for other states and for the federal government (and other countries) to follow.

Practice Implications: Clinicians should modify their informed consent processes by supplementing traditional discourse with certified PDAs to obtain liability protection and reimbursement incentives.

## O.47.5
## Reproductive decision support for couples at risk for hereditary cancer: an effect evaluation

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Background: A predisposition for hereditary cancer is usually autosomal dominant, implying that there is a 50% risk of transmitting the mutation to offspring. This knowledge may evoke challenging decision-making processes among couples at risk for hereditary cancer and child wish. This project aims to support carrier couples during reproductive decision-making by the use of a patient decision aid.

Methods: The decision aid was developed according to the IPDAS guidelines and focuses on three main reproductive options that enable carrier couples to have a genetically related child: 1. natural conception without genetic testing, 2. natural conception with prenatal diagnosis, and 3. preimplantation genetic diagnosis (PGD).

After completing a needs assessment, a usability test and a pilot study, the effectiveness of the decision aid is currently assessed in a nation-wide one group pretest-posttest study among couples with hereditary cancer and child wish. Main outcomes (decisional conflict, knowledge and decision self-efficacy) are assessed before use of the decision aid (T0), immediately after (T1) two weeks (T2) and three months (T3) after use, using paired samples t-tests.

Findings: Preliminary short-term results of 100 participants at T0, T1, and T2 and long-term results of 79 participants at T3 indicate a significant decline in mean decisional conflict scores (all p's <0.001). Furthermore, couples' knowledge regarding available reproductive options was significantly increased (all p's <0.001). Couples' decision self-efficacy did not significantly increase at T1 (p=0.124) and T2 (p=0.055). At T3 decision self-efficacy increased significantly (p<0.001).The decision aid was overall highly appreciated by end-users and evaluated with a mean score of 8.4 (scale 1-10). The mean time spent using the decision aid was 24 minutes (range 2-104) and participants viewed on average 20 out of 36 pages.

Discussion: Preliminary findings will be extended with data on a total of >80 participants at T3, including informed choice outcomes. In anticipation of these findings, we will strive for structural implementation of the decision aid in oncogenetic counselling. Ultimately, it is expected that the decision aid will enable end-users to make an informed decision, which may lessen the negative psychological impact of decision making on couples' daily life and wellbeing.


## O.48.1
## 'For young people like you': Negotiating age categories in health care interactions

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Background: A person's age is clinically relevant for diagnosis and treatment, but age categories also have social meanings. For example, youthfulness is often positively valued, while ageing and older age are oriented to as delicate. Our research asks how frequently age is made relevant in health care consultations, and examines how the clinical and social meanings of age function as interactional resources for the progression of health care encounters.

Methods: The initial dataset included over 650 video-recorded and basically transcribed consultations with general practitioners, specialists and nurses talking with adult patients aged 18 and over. These came from two existing corpora: the New Zealand ARCH Corpus of Health Interactions[1] and the UK One in a Million Primary Care Consultations Archive.[2] All transcripts were searched for references to age using NVivo. A collection of excerpts for closer analysis was built up iteratively using established methods of conversation analysis. We transcribed selected excerpts in finer detail and micro-analysed them with reference to video recordings of full consultations in group data sessions.

Findings: Just under half the consultations examined included one or more references to age by either participant. Most related to routine clinical business such as recording how old the patient is, assessing family histories or discussing age-related conditions, and were usually treated as unproblematic, without disrupting the smooth progression of the interaction. However, our analysis revealed that in cases where social meanings were carried over into the clinical context, whether explicitly or implicitly, references to age often became procedurally consequential, occasioning negotiation, resistance or interactional 'trouble'. For instance, participants might contest the definition or predicates of a given age category, resist being categorised in a particular way, or orient to age categorisation as a delicate matter.

Discussion: In the clinical world, constructs around age, ageing and 'life course' often have different meanings and implications than they do for lay people. This study adds to our currently limited understanding about exactly how social and clinical meanings linked to age and life stage are negotiated in routine health encounters, and how these interactional practices influence mutual understanding and health outcomes.

[1]http://tinyurl.com/ARCH-Group

[2]http://www.bristol.ac.uk/primaryhealthcare/researchthemes/one-in-a-million/

**O.48.2**
**"It's like riding out the chaos": Care team perspectives on addressing medical and social needs among high-utilizer patients in the SUMMIT intensive ambulatory care trial**
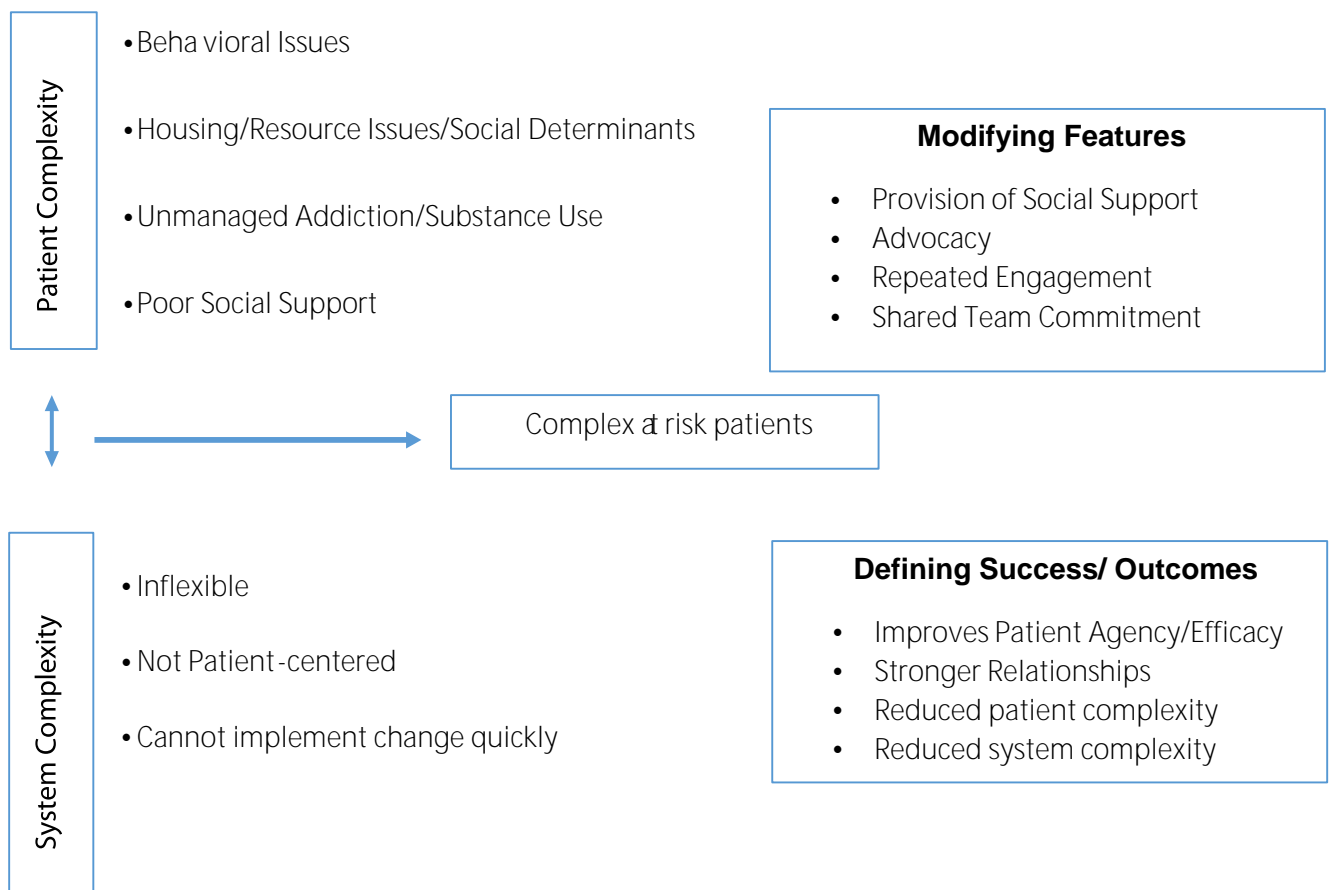
**Brian Chan, Oregon Health & Science University**
**Elizabeth Hulen, VA Portland Health Care System**
**Samuel Edwards, Oregon Health & Science University**
**Patricia Carney, Oregon Health & Science University**
**Somnath Saha, Oregon Health & Science University**

High-cost high-need (HCHN) patients consume a large proportion of healthcare resources and often receive poor-quality care. Intensive ambulatory care interventions have emerged to better meet these patients' needs, but little is known about how the teams delivering these interventions view patients' needs and how to meet them. We performed a qualitative evaluation of the perspectives of multidisciplinary staff on caring for HCHN patients in the context of the SUMMIT trial, an intensive ambulatory care intervention for HCHN patients that features low patient-to-staff ratios, flexible scheduling, and outreach activities.

Methods : We conducted one-hour semi-structured interviews with 15 multidisciplinary staff members at a clinic serving a predominantly houseless patient population; 9 interviews were with members of the SUMMIT team, 6 were with "usual care" staff at the same clinic. Staff members included 4 physicians, 1 nurse, 3 licensed clinical social workers, 2 community health workers, 2 care coordinators, 1 team manager, and 2 pharmacists, who reflected on their experiences caring for HCHN patients. We conducted a thematic analysis in which we developed an initial coding schema, dual-coded each transcript, and used iterative consensus to derive emerging themes.

Results: Staff perspectives revealed that challenges in caring for HCHN patients reflect individual patient complexity (social and medical) which, along with system-level complexities, create mismatches between patient needs and healthcare resources. Four broad domains with associated themes emerged from our analysis (Figure): 1) individual patient complexity including perceived lack of social support; 2) system complexity including inflexibility of social services and clinic-centered ambulatory care models to meet these patients' needs; 3) modifying features that bridge care mismatches included provision of social support and creating opportunities for repeat engagement; and 4) defining successes through development of patient self-efficacy. Team members highlighted the importance of supporting patients through chaotic times that otherwise led to clinical deterioration and high utilization.

Conclusion: HCHN patients have complex needs that are poorly matched with healthcare system resources, leading to gaps in care. Intensive ambulatory care teams bridge mismatches through additional time and flexible scheduling, providing social support and advocacy, and building trusting relationships to support self-efficacy.

Patient Complexity

- Behavioral Issues
- Housing/Resource Issues/Social Determinants
- Unmanaged Addiction/Substance Use
- Poor Social Support

**Modifying Features**

- Provision of Social Support
- Advocacy
- Repeated Engagement
- Shared Team Commitment

Complex at risk patients

System Complexity

- Inflexible
- Not Patient-centered
- Cannot implement change quickly

**Defining Success/ Outcomes**

- Improves Patient Agency/Efficacy
- Stronger Relationships
- Reduced patient complexity
- Reduced system complexity

**O.48.3**
**Appraising social isolation and its relation with physical and mental health among North-Italian seniors**

**Maddalena Fiordelli, Institute Of Commuication and Health, Università Della Svizzera Italiana**
**Serena Petrocchi, Institute Of Commuication and Health, Faculty Of Communication Science, Università Della Svizzera Italiana**
**Gabriele Sak, Institute Of Commuication and Health, Faculty Of Communication Science, Università Della Svizzera Italiana**
**Benedetta Guggiari, Faculty of Psychology, Università Cattolica del Sacro Cuore,**
**Peter J Schulz, Institute Of Commuication and Health, Faculty Of Communication Science, Università Della Svizzera Italiana**

Background. Social isolation is harmful for health and it is a complex bi-dimensional construct, whose objective and subjective dimensions are important to distinguish as each stands in a different relation with mental and physical health. Previous studies have often missed the opportunity of measuring this complex construct by covering both dimensions. In addition, no previous study has tested the composite instrument of Cornwell & Waite (2009), which covers both, in an Italian context. Therefore, the main objective of this study is the validation of the Italian version of the scale, while appraising social isolation among northern Italian seniors and its relation with health.

Method. This survey collected data from 306 over 65s participants ($M_{age}$ = 76.11, SD = 7.5; 132 male). Questionnaires were administered face-to-face by one author and encompassed: social disconnectedness scale; perceived isolation scale; abbreviated Lubben Social Network Scale; measures of general and mental health, and depression.

Findings. The correlations showed the expected patterns (rs > .04, ps< .05). The Social Disconnectedness and Perceived Isolation positively correlated each other and negatively with Lubben scale. Social Disconnectedness and Perceived Isolation were positively correlated with depression, while Perceived Isolation was negatively correlated with physical and mental health. Other correlations emerged between Lubben scale and depression (negative), between physical and mental health (positive), and between physical and mental health and depression (negative). HRAs demonstrated that neither objective isolation (ps > .05) nor subjective isolation (ps > .05) were significant

predictors of physical health, Fs(5 252) < 4.85 3.83, ps < .002; but yielded significant results considering mental health and depression Fs(7 245) > 16.78, p < .0001. Participants with high perceived isolation scores showed low scores on their mental health (ts < -2.68, ps < .02) and higher depression (ts > 6.00, ps < .0001).

Discussion. Our results show the expected correlation between social isolation and health, and the distinct relations of the two dimensions. Cornwell and Waite scale of social isolation worked among the population of Italian seniors, thus confirming itself as a promising tool for measuring the two dimensions in a novel cultural context.

**O.48.4**
**Language Used by Physicians Reflects Positive and Negative Attitudes towards Patients in Medical Records**

**Mary Catherine Beach, Johns Hopkins University School of Medicine**
**Breanne Das, Johns Hopkins University School of Medicine**
**Jenny Park, Johns Hopkins University School of Medicine**
**Somnath Saha, Department of Medicine, Oregon Health Sciences University**

Background: Clinicians may convey attitudes towards patients in medical records, which could have an impact on subsequent patient care, but few studies have examined the emotional valence of language used in medical records to describe patients. The objective of our study was to determine whether the language used in patient medical records reflects actual attitudes held by clinicians.

Methods: We analyzed data from 14 primary care HIV clinicians who rated their attitudes towards 131 patients after routine ambulatory encounters on a scale of 1 (much less than average respect) to 5 (much more than average respect). We correlated the clinician ratings with a blinded reviewer who simply read the note. Two authors (MCB and BD) reviewed all clinician notes and met regularly to identify themes representing language with potential valence (positive or negative).

Results: There was a significant correlation between physician self-reported attitudes and those assessed by the blinded reviewer: 0.29 (p<0.001). Content analysis revealed similar information conveyed differently across three domains: documentation of psychosocial history, prior treatment adherence, and future treatment plans. In terms of psychosocial history, clinicians expressed warmth/concern (Her only other concern at the moment is her son who is in the service…she has not heard from him in > one month but believes he is well) vs. coldness/judgement (She continues to work part-time as a substitute teacher and reports that she could not find it within herself to realize the benefits to be derived from disclosing her HIV status to her partner). In terms of adherence, clinicians similarly expressed warmth/concern (The patient still struggles with adherence issues… at times I feel that he is just overwhelmed) vs. coldness/judgement (Unfortunately she neglected to refill her medication over the last week). In terms of treatment plan, clinicians documented unilateral ("I told the patient that most people who have pain do not resort to injecting heroin") vs. bilateral ("We discussed the possibility of stopping cigarettes at some point") discussions.

Conclusions: Language used by clinicians in medical records is not objective, and conveys their attitudes towards patients. Future research should evaluate the effect of these attitudes on quality of care.

**O.48.5**
**Social Resource Assessment: Application of a Novel Communication Tool During Hospital Discharge**

**Andrea Wallace, The University Of Utah**
**Nicole Pierce, UChicago Medicine**
**Erica Davisson, The University of Iowa**
**Toni Tripp-Reimer, The University of Iowa**

Objective: Hospital discharge planning requires shared understanding of patients' home context, but methods for facilitating meaningful communication between patients and health care providers about patients' social resources are largely undeveloped. This study evaluated an interactive tool designed to help patients communicate their social resources (e.g., for transportation, medications, diet) to providers, examining for its ability to identify patients at risk for poor health outcomes after hospital discharge.

Methods: In this convergent mixed methods study, hospitalized patients (n=70) completed the *D*-CEGRM social resource interview, demographic queries, and discharge readiness surveys (RHDS) on the day of discharge. Two weeks after discharge, patients completed post-discharge coping surveys via telephone (PDCDS). After data collection, nurses unassociated with patients' clinical care reviewed structured clinical notes created from the *D*-CEGRM, and categorized patients as likely to have "inadequate" or "adequate" social resources for home self-management. Nurse decision-making was tracked using an adjudication process; and post-hoc comparisons in patient characteristics, RHDS, and PDCDS were conducted.

Results: Nurses reviewing clinical notes created from *D*-CEGRM interviews achieved 71% agreement (50 of 70 cases) when first categorizing patients as having "inadequate" or "adequate" social resources at home. After adjudicating discordant cases, 34 (49%) were categorized as having "adequate", and 36 (51%) as having "inadequate," social resources. Number and accessibility of supports; presence of negative relationships; and previous struggles meeting health-related needs (lifestyle, financial, health system navigation) were important decision-making factors. Post-hoc comparisons revealed that those categorized as having inadequate resources were more commonly unmarried, living alone, employed, and had lower education and health literacy ($p \leq .01$-.8). Mean discharge readiness ratings were lower for those with inadequate vs adequate resources (Pt-RHDS, 181.53 vs 193.06, p=.008). Those with inadequate resources reported more coping difficulties after hospital discharge (PDCDS, 19.88 vs 14.10), but differences were not statistically significant (p=.21).

Discussion: Clinical notes created from the *D*-CEGRM assessment contributed to a process by which nurses identified patients with multiple characteristics placing them at risk for poor health outcomes after hospital discharge. The *D*-CEGRM may be an efficient tool for patients to communicate access to social resources, and an effective guide to aid transitional care planning.

# Symposia

## S.15
## Communication in Healthcare in the Iberian Peninsula (SP3CS and UFV): Trends and future directions

**Irene P. Carvalho, University of Porto**
**Nuno Madeira, University of Coimbra**
**Margarida Figueiredo-Braga, University of Porto**
**Miguel Barbosa, University of Lisbon**
**Pedro Morgado, University of Minho**
**Paulo Vitória, University of Beira Interior**
**Roger Ruiz-Moral, San Francisco de Vitoris University**

Professionals with clinical practice increasingly seek courses teaching communication skills to be able to respond to the challenges that the patient-centered approach raises.

In this symposium, the state of the art pertaining to teaching and research on communication in clinical settings at the academic level in the Iberian Peninsula is presented. The goal is to identify current trends and to generate discussion about Iberian challenges and future directions for communication in healthcare teaching and research.

Chair 1 is a founding member and the current president of the Portuguese Society for Clinical Communication in Healthcare (SP3CS), and has been teaching and publishing on this topic for more than 10 years.

Chair 2 is a founding member of SP3CS and a member of its Board of Directors. He is a consultant psychiatrist and invited assistant at Coimbra University's medical school. His research interests and teaching activities include patient-centered medicine, clinical communication and barriers to care.

Presenter 1 is a founding member of SP3CS and has taught and conducted several research projects on patient-centered communication skills for over 10 years.

Presenter 2 is a founding member of SP3CS and a member of its General Assembly. She has taught Communication Skills over 15 years and published research and developed curricula at the pre and post-graduate levels on this topic.

Presenter 3 is a founding member of SP3CS and a member of its Board of Directors. He teaches communication skills in different settings, and has conducted research on the effectiveness of communications skills training programs.

Presenter 4 is a founding member of SP3CS and a member of its Board of Directors. He is professor of psychiatry and clinical communication at School of Medicine, University of Minho, and has conducted research on clinical communication skills development.

Presenter 5 is a founding member of SP3CS and a member of its Board of Directors. He is professor of health psychology and preventive medicine at Beira Interior University and has conducted studies on clinical communication skills development.

Presenter 6 is a professor at the School of Medicine of Francisco de Vitoria University. He is a Specialist in Family Medicine and has developed research and published extensively in the fields of clinical communication and shared decision-making.

## S.16
## State-of-the-Art Methods for Teaching Inhaler Technique

**Delesha Carpenter, University of North Carolina at Chapel Hill**
**Sinthia Bosnic-Anticevich, Woolcock Institute of Medical Research, The University of Sydney**
**Valerie Press, University of Chicago**
**Iman Basheti, Applied Science Private University**
**Sheila Ryder, Trinity College**
**Pamela Srour, Woolcock Institute of Medical Research, The University of Sydney**

Rationale. Between 40-90% of patients with respiratory conditions do not use their inhalers correctly. Incorrect inhaler technique reduces the amount of inhaled medication that reaches the lung, compromising the medication's

effectiveness. Consequently, incorrect inhaler technique has been associated with negative clinical outcomes, such as worse disease control and more emergency department visits. Because inhaler technique typically deteriorates within 1-6 months of receiving technique instruction, guidelines recommend that providers give booster technique instruction at follow-up visits. Unfortunately, due to time constraints and other environmental barriers, providers rarely provide inhaler technique instruction. Moreover, an estimated 39-67% of health care providers are unable to describe correct inhaler technique.

Although several methods for providing inhaler technique instruction have been reported in the literature, rarely have the ability of these methods to be sustainability implemented and integrated into clinical practice workflows been examined. Thus, the purpose of this symposium is to describe and demonstrate feasible and sustainable state-of-the-art inhaler technique instructional methods that can be used to improve inhaler technique knowledge and skills for both patients and providers. The instructional methods discussed in this symposium focus on inhaler technique but have broader applicability to patient self-administered medications.

Description of individual presentations. Our international panel of presenters will each spend 10-15 minutes sharing their recent research on inhaler technique instruction and discussing how these state-of-the-art methodologies have been implemented in clinical settings.

Presenter 1 will provide background regarding the use of inhalers in clinical practice and the challenges associated with inhaler technique education/instruction. The opportunities and strategies for using innovative instructional approaches in clinical practice will be discussed.

Presenter 2 will discuss patient-centered tailored approaches to inhaler teaching using both in-person and virtual "teach-to-goal" teach-back methods in an adult inpatient setting. She will present results of these two approaches for improving inhaler technique and reducing acute care utilization in asthma and COPD patients, as well as patient feedback obtained through focus groups and survey data.

Presenter 3 will describe generic and tailored video-based education has been implemented with youth in pediatric outpatient and school settings. In addition to providing a demonstration of the videos, she will present results related to the videos' feasibility and effectiveness.

Presenter 4 will describe an effective inhaler technique educational strategy involving the "Show and Tell" counseling service. She will also describe novel inhaler-based reminder labels, which are personalized and have resulted in better retention of inhaler technique skills in asthma.

Presenter 5 will describe how timestamped data on patients' inhaler technique gathered by a novel acoustic recording device may reveal errors in routine use that differ from patients' performance when observed in the clinic/pharmacy. She will discuss how this personalized biofeedback can support targeted counselling in a community pharmacy setting.

Presenter 6 will discuss the practice implications of these state-of-art instructional methods and identify critical research gaps in the field. Key areas for future research will be identified and discussed with audience members.

Qualification of presenters. Our interdisciplinary panel of internationally recognized experts in the field of inhaler device use include MDs, pharmacists, respiratory therapists, and health educators who have collectively published over 130 papers and book chapters on inhaler technique. In addition to developing and evaluating the five methods of inhaler technique instruction described above, they have studied innovative methods of implementing and standardizing inhaler education. Our team has also led train-the-trainer projects for residents and identified successful methods, including the use of simulated and real asthma patients, in educating pharmacy students on correct inhaler technique.

# Workshops

## W.22
## TEACHING ABOUT PERSONAL COMMUNICATION STYLE

**Marianne Brouwers, Department of Primary and Community Care Radboudumc**
**Ellemieke Rasenberg, Department of Primary and Community Care Radboudumc**

Rationale: Patient centred communication is a core concept in healthcare. To achieve this, the physician must be able to maintain a professional doctor-patient relationship and be realistic (Stewart 2004). Therefore, physicians need to know their preferred communication style (CS), which is determined by personal and contextual factors, its effect on the relationship, and how to switch them when needed.

Based on the longitudinal pre-clinical course "Your communication style as a doctor" in our communication skills training program (CST) at the Radboudumc medical school, we designed this 2h-workshop.

Learning objectives:

- Participants learn about the theoretical background of CS and it's relation with socialisation.

- Participants learn about the effect of different CS on doctor-patient communication.

- Participants experience the effect of their own preferred CS on doctor-patient communication.

- Participants experience the effect of a different CS on doctor-patient communication.

Teaching methods: Introduction (goal and content), 2 min

Theoretical outline CS, 8 min

Experiential teaching: Split large group into 4 subgroups representing each communication style (max. 5 participants per subgroup). Each sub group will be assigned a CS from which they will try to react to the same neutral statement of the actor. Interactive feedback by actor and teacher after 4 reactions. Rotation subgroup to other CS (= 1 round). Total 3 rounds, total time 30 min.

Experiential teaching: individual participant will practice preferred communication style in a simple consultation with an actor/patient. Observation by others. Interactive feedback by actor, teacher and observers. Next, same participant will practice again with use of a different CS, followed by interactive feedback. Max. 10 min per participant, total time 40 min (4 participants).

Participants will be asked write down their take-home message and how they want to implement the learned in their current teachings. Quick round on this. Participants will be informed that after 6 weeks they will be emailed, reminding them of their plans (when desired), 10 min.

Evaluation of outcomes for participants: See above.

## W.23
## Towards effective Shared Decision Making: how to stimulate workplace based learning and feedback?

**Anouk Baghus, Maastricht University**
**Esther Giroldi, Maastricht University**
**Angelique Timmerman, Maastricht University**
**Trudy van der Weijden, Maastricht University**

Rationale: Patients increasingly desire involvement in medical decisions. Although Shared Decision Making (SDM) is the preferred approach to involve patients, it is currently not routinely applied in clinical practice. The number of SDM training programmes is therefore increasing and research-based knowledge is widely used to underpin them, still it seems difficult to translate this evidence into (educational) clinical practice. There is a high level of diversity in training content and formats used, insufficient underpinning with educational theory and consistent application of SDM behaviour in clinical consultations over time is lacking. As a first step in developing a workplace based SDM learning module, Entrustable Professional Activities (EPA's) have been developed.

Learning objectives:  Participants will be informed about developed SDM EPAs and behavioral indicators for postgraduate medical education. Barriers and facilitators of their application will be discussed and interactive **assignments will be used to stimulate reflection on how to transfer these EPA's into educational practice supporting** observation, feedback and continuing learning cycles.

A video example of how EPAs may be used in postgraduate workplace based learning will be provided.

Teaching methods

**Introduction and presentation of goals workshop (5')**

**Presentation of SDM EPAs and behavioural indicators (5')**

Individual questionnaire and plenary group d**iscussion on SDM EPAs and behavioural indicators (15')**

Brainstorm in small groups, followed by a plenary discussion, on possible barriers and facilitators and potential **practice based solutions in training healthcare professionals in SDM (13')**

Presentation about experienced barriers and facilitators in GP-**trainees based on an interview study (5')**

Assignment and large group discussion on potential uses of feedback tool in medical training programmes using **videotaped consultations and assessment rubrics (25')**

Video example of a consultation including feedback conversation and interview on using EPAs in GP educational **practice (10')**

**Wrap up and feedback on the workshop using a written evaluation form and discussion (12')**

Evaluation of outcomes for participants:  Oral discussion and written evaluation forms will be used let the **participants reflect on what they have gained during the workshop by asking: "What is the most important thing you have learned during this workshop" and "How do you intend to implement t**he output in your own educational **practice".**


## W.24
## Understanding What Matters to Patients: A Hands-On Workshop

**Gregory Makoul, PatientWisdom**

Rationale: Despite widespread advocacy for the concept of patient-centeredness, it is fair to say that current practice is just scratching the surface of understanding what matters to patients as people.  This workshop will offer hands-on experience in using a novel digital platform to collect patient perspectives and generate inSIGHT summaries designed to provide clinicians with an at-a-glance view of the whole patient (e.g., goals, barriers, joys, pressures, how health affects life).  Participants will reflect on how brief patient narratives can inform teaching, research, and practice.

Learning objectives: (1) Gain hands-on experience in using a novel digital platform for collecting and distilling stories about themselves, their health, and their care; (2) Reflect on the experience of sharing stories as well as seeing the 1-screen inSIGHT summary of their perspectives; (3) Articulate how this approach and content could improve everyday clinical practice as well as inform teaching and research.

Teaching methods: Hands-on experience with PatientWisdom – a digital platform that focuses on what matters to patients as people – coupled with interactive demonstration, reflection, and discussion.

Opening and orientation (20min)

Minute 00-10     10min   Introductions

Minute 10-20     10min   Overview of workshop topic and approach

Hands-on experience with PatientWisdom (30min)

Minute 20-35     15min   Opportunity to use PatientWisdom to securely share their own stories

Minute 35-40     05min   Silent reflection on experience

Minute 40-50     10min   Discussion of hands-on experience

Exploration of the inSIGHT summary (20min)

Minute 50-55     05min    Group review of facilitator's inSIGHT summary

Minute 55-60     05min    Self-review of individual inSIGHT summaries and silent reflection on experience

Minute 60-70     10min    Discussion of how this approach could inform teaching, research, and practice

Application and wrap-up (20min)

Minute 70-80     10min    Discussion of how this approach and content could inform practice, teaching, and research.

Minute 80-90     10min    Wrap-up and take-aways – participants will submit an index card with main take-away points, proposed use cases, name, and email; facilitator will collate and distribute to the group via email

Evaluation of outcomes: Dedicated opportunities for silent reflection and discussion are integrated into the workshop.  As part of the wrap-up, participants will submit an index card with their main take-away point.

# Works in Progress Oral Presentations

## WIP.5.1
### How to train healthcare professionals in border areas to collaborate internationally?

**Juliët Beuken, Maastricht University**
**Mara Bouwmans, Maastricht University**
**Daniëlle Verstegen, Maastricht University**
**Diana Dolmans, Maastricht University**

Background:  In the Euregion Meuse-Rhine (EMR), where borders of Germany, Belgium and the Netherlands meet, international healthcare collaboration seems logical.  In a previous study, we concluded there are several training needs of healthcare professionals in this border-area, concerning language, standardization and (intercultural) communication. Although the need to train international collaboration is evident, creating sufficient support for international collaboration seems necessary since some professionals showed a negative attitude towards such collaboration. It is thus important to develop training that addresses the specific needs of healthcare professionals and simultaneously helps overcoming resistance towards international collaboration. (During the session) we aim to explore strategies to develop a training that considers both needs and resistance healthcare professionals may have.

Methods:  To explore strategies for developing a training aimed at international collaboration, we will introduce results of our previous study concerning (training) needs and cultural differences in international healthcare collaboration. Based on these findings, and informal conversations with stakeholders in international healthcare collaboration, several statements are formulated. We aim to organize an interactive session in which we ask attendees to respond to statements and discuss ideas to develop training aimed at international healthcare collaboration.

Preliminary findings:  Statements concerning the development of training aimed at international collaboration and how to take into account needs and resistance of healthcare professionals are currently being formulated. This list of statements will be revised and updated based on future discussions and progressive insights.

Preliminary implications of research:  The findings of the present study can be helpful when training communication among healthcare professionals for international healthcare collaborations. Attitudes can be taken into account when designing interventions aimed at supporting international healthcare collaboration.

Request for feedback:  What approach would be helpful to motivate healthcare professionals to collaborate internationally?

How can we expose cultural differences between healthcare (professionals) in different countries in a constructive way?

## WIP.5.2
### Increasing Collaboration: Perceptions within the Multidisciplinary Team

**Renee Lim, Pam McLean Centre**
**Thomas Rolls, Pam McLean Centre**
**Edward Farley, Pam McLean Centre**

Background:  An effective multidisciplinary team is recognised as crucial for creating a safe and productive clinical space to achieve positive patient outcomes and professional satisfaction. Australia's collegial healthcare environment considers quality collaboration fundamental to effective health service delivery, however communication and teamwork breakdown is profound within healthcare systems. Current teamwork learning within higher education does not readily occur within a cross-disciplinary context, and professional learning through workshops often lack continuity.

Methods:  A literature review was conducted using the Ovid Medline database to identify areas of improvement within multidisciplinary teams. The roles of healthcare staff were functionally categorised into 'discipline' and 'team' based outputs. A focus group of three Allied Health professionals trialled questions to determine the relevance of identified teamwork priorities and provide discipline-specific responses. Further interviews will be conducted across

healthcare disciplines. An evolving arts-based workshop was constructed to address staff responses and identified priorities as 'trainables' in a Quality Improvement project.

Preliminary Findings:  The focus group has shown that there is a need to promote respect for the roles of professionals from other disciplines through establishing clarity of discipline-specific duties. Role 'blurring' is viewed negatively, as a product of misunderstanding rather than as a medium for increasing continuity of patient care. By viewing allied professionals under the 'consultant' model, team leaders promote inclusiveness and unified decision making. Additional data will be available later in 2018 to further inform the workshop design.

Implications for Future Research:  Interview data will provide an understanding of how discipline-based role clarity and respect for role diversity is actualised. It will also reveal how leadership and teamwork roles manifest between professions of the multidisciplinary team. Understanding how perspectives among disciplines diverge may reveal a more meaningful approach for teaching protocols and content delivery when training healthcare staff within the multidisciplinary team environment rather than within disciplines.

Request for Feedback:  Would you use this workshop model with professionals and/or with students? Is this approach likely to translate to clinical environments long-term? Does the workshop address the target areas and perspectives of professionals?


## WIP.5.3
## Professional culture and health communication: Narratives of pioneer U.S. interprofessional healthcare pain management teams.

### Iredia Olaye, Seton Hall University

Background: In recent years, U.S. reported rates of prescription drugs misuse as a consequent of chronic pain treatment and management have increased dramatically. 100 million Americans suffer from chronic pain each year. Previous studies have shown that Interprofessional healthcare teams improve the management and outcomes of patients who suffer from chronic pain. Effective communication among health care professionals is pivotal to providing high quality patient care. A barrier to effective communication within a healthcare team is professional culture. Health practitioners from pioneer interprofessional healthcare pain management teams in the United States were interviewed. The data will be analyzed to elicit professional experiences, conflicts, team care and process management issues. This study adds to the store of knowledge on bridging the gap between experiences and best practices.

Methods:  Semi structured interview study, with purposive sampling and inductive qualitative analysis.

Preliminary findings: Common communication barriers to efficient and effective interprofessional pain management care were generated from the interviews. Practitioners reflected on how their professional culture affected team performance. Various strategies and tactics for improving communication were discussed.

Preliminary implications of research: The capacity of interprofessional healthcare teams to manage chronic pain will be improved by adopting health communication best practices. Interprofessional healthcare teams are being implemented in various health settings in the U.S. quickly to deal with the chronic pain epidemic. Effective communication between the members on the interprofessional pain management team is crucial. This study will contribute to the growing body of evidence for systemic changes to improve patient care.

Request for feedback: I would like answers to the following questions: How are interprofessional teams implemented in clinical practice in your various countries? What intercultural issues create barriers to effective interprofessional communication? What are the methodological limitations that I should pay attention to as my research progresses? What methodological suggestions would the audience have to increase the validity of the study? By receiving a clear indication of the viability of the project and suggestions on the areas that need improvement, I will be able to move this project forward.


## WIP.5.4
## The impact of motivation in return to work after work disability

### Charlotte Vanovenberghe, KULeuven
### Anja Van Den Broeck, KULeuven
### Emelien Lauwerier, KULeuven

**Marc Du Bois, KULeuven**
**Lode Godderis, KULeuven**

In Belgium, work disability involves a yearly cost of roughly 7 billion euro's. Literature in RTW suggests it is an important facilitator or barrier to RTW. There is increasing research on the factor of motivation in psychology. Both the Selfdetermination Theory (SDT) and Motivational Interviewing (MI) have proven to be scientifically relevant in other domains. They have not yet been implemented in the context of Return to Work (RTW). Hypotheses are following: There's an interpersonal difference in motivation to RTW within the group of work disabled people (1). There's an association between motivation and time before RTW (2). The implementation of MI by the social security physician and his/her interdisciplinary team has an impact on the quality of motivation within the work disabled (3). The augmentation in the quality of motivation is related to a faster and more sustainable RTW (4).

There are two phases in this research. Hypotheses 1 and 2 (based on SDT) are being addressed in the first phase. We will not discuss this further here. Hypotheses 3 and 4 are being addressed in the second phase. A RCT comparing MI to CAU will be performed on two diagnostic groups in a real social security setting. The effect of MI (compared to CAU) on the duration before RTW, the sustainability of RTW and quality of life (QOL) will be examined. Descriptive analysis, logistic regression analysis and log rank test will be performed on these data. Exclusion criteria for both phases are: language or comprehensive difficulties, maternity protection, unemployed/pensionable/minors. For the RCT, exclusion criterion of 'high motivation' was added.

| Medical diagnosis 1 | | Medical diagnosis 2 | |
|---|---|---|---|
| - Motivation CAU | - Motivation MI | - Motivation CAU | - Motivation MI |
| 75 | 75 | 75 | 75 |

Seen its innovative character, feedback and input from a scientific audience for the second phase – the RCT – would be of great value. Is MI feasible within 3 to 5 counseling sessions? What are possible confounders? How do we fill in the CAU? Are the chosen analysis correct? Are the chosen dependent variables for phase 2 correct?

## WIP.5.5
## Value Stream Mapping in care organizations: Improving the discharge process of breast cancer centers

**Marina Nowak, University of Cologne**

Background:  The discharge of patients from breast cancer centers has to be prepared adequately to guarantee a successful transition to general practitioners. However, patients evaluate the process rather negatively and the process is challenging for the involved personnel. Value Stream Mapping aims to improve the discharge process by improving communication between different disciplines and professions. The method helps the interdisciplinary team to visualize complex work flows and thereby to create a more efficient and value-adding process. The project at hand examines the question whether the discharge process in breast cancer centers can be improved with Value Stream Mapping. The overall aim of the project is to evaluate the method of Value Stream Mapping when applied to the discharge process of breast cancer centers.

Methods:  The intervention is evaluated based on a before-after-follow-up study design. The discharge process is measured in four participating breast cancer centers before the intervention, directly afterwards and six months later. The evaluation is carried out through time measurement and questionnaires for patients and employees. These data are analyzed by descriptive and inferential statistical methods.

Preliminary findings:  The before-test in the first hospital has already been completed. However, further data collection is still running, wherefore findings cannot yet been presented.

Preliminary implications of research

Value Stream Mapping could be used to improve different processes within healthcare with a focus on patients and by improving collaboration in interdisciplinary work processes.

Request for feedback:

- How to deal with small response rates?

- How to use and disseminate the insights out of the Value Stream Mapping-workshops?

- How to integrate qualitative research?