Canadian Medical Education Journal

Canadian Conference on Medical Education 2021 Abstracts
Les résumés de la Conférence canadienne sur l'éducation médicale 2021

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Pre-Conference Workshops

April 15th, 2021
10:00 EST; PCW – 60550

Become a Rockstar Virtual Synchronous Facilitator in Zoom

Heather MacNeill University of Toronto, **Kataryna Nemethy** University of Toronto, **Jason Liang** University of Toronto

Rationale/Background: Social distancing has forced educators into teaching virtually with little to no preparation. This workshop is your opportunity to practice "presenting like a Rockstar" using Zoom! Using Garrison's community of inquiry framework, you will discuss social, cognitive, and teaching presences to consider when teaching synchronously. You will review "what buttons to push" in this environment while incorporating effective techniques such as interactivity, feedback, reflection, and social learning, all within a healthcare context.

Methods: There are 3 parts to this fully online workshop 1. Asynchronous Prework: view 7 videos, group introductions, needs assessment, and reflections (2-4 hrs depending on learner comfort level) Optional synchronous online meeting (for Zoom setup before the conference) 2. Synchronous Online workshop during CCME Preconference (3 hours on Zoom)- including review of pedagogical principles and best practice in online environments, online facilitation techniques, learner considerations, and hands on group work to create synchronous learning lesson plan 3. Post course presentations (1 month after the course). Learners will prepare in a 10 min group presentation using the principles and tools learned in the course which they will present to the rest of the group (3-6 hrs group prep, 2 hrs presentation) Requirements: computer with webcam, headset or earbuds with mic and a sense of adventure!

Target audience: Healthcare educators, including UGME, PGME, CPD and CME.

Learning objectives: 1. Demonstrate interactive features of synchronous technologies (e.g. Zoom) in teaching 2. Recite practical tips and learning considerations for online

synchronous learning 3. Contrast the advantages and disadvantages of synchronous online learning

14:30 EST; PCW – 60219

Themes emerging from the 2020 National Resident Survey

Ramona Neferu McMaster University, **Tehmina Ahmad** University of Toronto, **Michael Arget** University of Ottawa, **Kat Butler** University of Toronto, **Colin Boyd** Dalhousie University, **Ishrat Gill** University of Alberta, **Arno Kumagai** University of Toronto, **Elizabeth Sneyd** Resident Doctors of Canada; National Resident Survey Staff Lead, **Robert Conn** Resident Doctors of Canada

Rationale/Background: There is a lack of empirical data on a number of evolving issues faced by today's resident doctors. The last National Survey conducted by Resident Doctors of Canada (RDoC) was in 2018. To keep current with our understanding of resident concerns, RDoC is conducting a new National Survey in November 2020. The bilingual online survey will be sent to resident doctors training at 13 faculties of medicine across Canada and contains 60 questions collecting demographic information on diversity, bullying in the training environment, workload and burnout, resident transfers processes, transition to practice, and physician mobility. Many questions are iterative from the 2018 survey, allowing for longitudinal analysis. The survey has been approved by the University of Toronto Research Ethics Board.

Methods: The session will begin with a presentation summarizing some of the most informative data emerging from the survey results. The second segment will include a panel comprising a resident, medical student, and medical educator who will respond to the findings presented. The remainder will be dedicated to small group discussions with the panelists and workshop participants focusing on the survey's themes.

Target audience: This session is designed for medical trainees, postgraduate program directors, administrators, deans, educators and any others interested in the lives of resident doctors.

Learning objectives: Workshop participants will: a) Gain an appreciation of the many issues, perspectives, and challenges of resident doctors in Canada relating to residency training, diversity and wellness, and career development. b) Identify the implications of the data and generate recommendations

14:30 EST PCW-59997

Virtual Learning: A New Modality Of Medical Education Teaching In The Era Of Pandemics

Manasik Hassan Hamad Medical Corporation, **Magda Youssef** SIDRA medicine, **Eman Almaslamani** SIDRA medicine, **Ahmed Alhammadi** SIDRA medicine

Rationale/Background: Teaching in the clinical environment is a challenging. Many methods have been described with wide variety of rang in delivering the information. Recently, teaching and learning using technologies such as virtual worlds have expanded rapidly specially with new global situation of COVID19 pandemic which may limit or change the way we teach the medical learners. Virtual learning is distance learning conducted in a virtual learning environment with electronic study content designed for self-paced (asynchronous) or live web-conferencing (synchronous) online teaching and tutoring. It has several advantages over traditional didactic models of instruction.

Methods: Participants will be engaged in several activities: (1) Interactive didactic introduction highlights the history; definition of virtual learning and it is importance as alternative methods of education when it is needed (2) In small groups table discussion; participants will identify barriers to implement virtual learning in a daily busy clinical environment (3) Engagement in discussions and reflections on video-clips of different approaches in how to implement the different types of virtual learning (4) At the end we will share some measures to assess the effectiveness of virtual learning on patient outcomes and learners' behaviors, skills and knowledge.

Target audience: The workshop welcomes all stakeholders in medical education, physicians, training program leaders, faculty development and other educators interested in the medical education and teaching.

Learning objectives: 1) Define the virtual learning and highlight it is importance in medical education 2) Identify benefits and challenges to apply it in a busy clinical setting 3) Describe different strategies to implement virtual learning and how to assess its effectiveness

April 16th, 2021

10:00 EST; WE2-2-60540

FACILITATE: Acting-Based Communication & Interpersonal Skills Training for Healthcare Professionals

Alexis del Vecchio Mayo Clinic, **Phillip Moschella** Prisma Health – Upstate

Rationale/Background: Communication underlies physicians' scope of practice. CanMeds lists communicator as a core competency for medical practice and education. Various models of communication training have been proposed in medical school and residency training. Acting provides a unique approach to developing such skills. Our acting-based communication skills course, taught by a Canadian-American professional actor and physician, has been taught to hundreds of medical students, nursing students, and medical residents at multiple institutions in the United States and internationally.

Methods: We will conduct sixteen acting exercises, targeted to the unique needs of healthcare professionals, especially physicians. This workshop is hands-on, participatory, interactive. We start with a brief introduction about educational theory and evidence underlying this initiative. Our hand-picked exercises develop skills such as nonverbal communication, active listening, presence in the moment, situational awareness, and self-awareness. Clinical correlates and debrief with participants are included. The workshop includes two peer-reviewed standardized patient vignettes in which participants play a patient and provider, and apply skills developed. We also provide a communication toolbox with tools they can implement on their next shift.

Target audience: Healthcare professionals at every level of training. This is an inter-professional initiative. We welcome a mixed audience of medical students, resident physicians, consultants/attendings, and allied members of the healthcare team.

Learning objectives: Upon completion, participants will be able to apply acting skills to facilitate patient-centered communication, utilize specific tools to improve their clinical practice, and practice skills of non-verbal communication, self-awareness, and active listening.

12:00 EST; PCW-66400

FACILITER: Cours de Théâtre pour Développer la Communication et les Relations Interpersonnelles Chez Les Professionnels de la Santé

Alexis del Vecchio Mayo Clinic, **Phillip Moschella** Prisma Health – Upstate

Rationale/Background: Communication underlies physicians' scope of practice. CanMeds lists communicator as a core competency for medical practice and education. Various models of communication training have been proposed in medical school and residency training. Acting provides a unique approach to developing such skills. Our acting-based communication skills course, taught by a Canadian-American professional actor and physician, has been taught to hundreds of medical students, nursing students, and medical residents at multiple institutions in the United States and internationally.

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Learning objectives: Upon completion, participants will be able to apply acting skills to facilitate patient-centered communication, utilize specific tools to improve their clinical practice, and practice skills of non-verbal communication, self-awareness, and active listening.

14:30 EST; PCW-60328

Considering Knowledge Syntheses: Where to begin

Tanya Horsley The Royal College of Physicians and Surgeons, **Rachel Ellaway** University of Calgary

Rationale/Background: Knowledge syntheses are increasingly being conducted by health professions education researchers in part due to the increase in primary studies. A challenge faced by researchers is determining what question maps to what knowledge synthesis approach given the multiple types of knowledge syntheses approaches available.

Methods: Didactic / dynamic participation in small groups

Target audience: Beginners interested in conducting evidence syntheses / Consumers of evidence syntheses

Learning objectives: In this workshop, we will briefly explore the nature, purpose, and value of common knowledge synthesis techniques. Drawing from the literature of synthesis methodology as well as experience, faculty will 1) Provide a brief overview of the history of evidence syntheses; 2) provide conceptual recommendations and introduce participants to tools for selecting the most appropriate knowledge synthesis method to answer their questions; 3) address alignment between question and synthesis methodology; and 4) support participants in selecting the most appropriate synthesis methodology for a question of their choice and enhancing their ability to read, understand and apply findings from common syntheses in medical education (systematic, scoping, realist, narrative and critical)

14:30 EST; PCW-60784

Improving Presentations: Say - It - Better, Show - It - Better

Douglas Wooster University of Toronto, **Elizabeth Wooster** University of Toronto

Rationale/Background: Electronic presentations are an important component of scientific communication in the health professions. Reviews and audits of short and long presentations at a variety of levels by professional presenters, educators and trainees show poor skills in preparation of 'slides'. In more than 55%, the character of text, background, animations and placements of logos detract from the quality of otherwise well - presented presentations. In up to 60% image optimization and control is poor. There is a role for faculty development, defined instruction of trainees and peer-to-peer promotion to improve the quality of presentations.

Methods: The workshop leaders will present findings from an audit of presentations and lead a large group discussion of the relevance of these findings. Techniques to improve text and optimize images will be examined using the "think, pair, share" technique. Participants will have the opportunity to participate in the modification of a standardized set of slides to learn the techniques discussed. Small and large group discussions will be used to identify strategies to train others. Considerations of different types of presentations will be discussed during the workshop. Participants will leave the workshop with a set of techniques to create better slides and ideas to disseminate this information to others.

Target audience: Anyone interested in learning how to improve their ability to create electronic presentations. A basic understanding of powerpoint is essential for this workshop.

Learning objectives: At the end of this workshop participants will be able to: 1) describe the current status of text and image use in electronic presentations 2) demonstrate ten technical skills in optimizing text and images for presentation 3) present a strategy to train others.

April 17th, 2021 - 10:00 EST
OA1 -1 Curriculum - COVID

OA1-1-1-60538

Results From a Theater-Based Communication Course for Medical Residents in the COVID Era

Alexis del Vecchio Mayo Clinic, **Phillip Moschella** Prisma Health - Upstate, **James Homme** Mayo Clinic

Background/Purpose: Communication underlies physicians' scope of practice. The necessary use of Personal Protective Equipment (PPE), especially masks, as a result of COVID, may make communication with patients more challenging and could risk eroding the patient-physician alliance. We previously created and taught a theater-based communication skills course for physicians, medical students, and nursing students. For this study, we taught our course with all participants wearing masks and practicing social distancing. We sought to assess if our curriculum could still be successful in developing communication skills deemed central to clinical practice.

Methods: Ten first-year emergency medicine residents at a tertiary care, University-associated, urban center participated in a one-hour workshop. A questionnaire was distributed to participants to rate their agreement with statements about communication and interpersonal skills developed. Survey participation was voluntary and confidential.

Results: For this IRB-approved study, 100% of participants answered the survey. All agreed or strongly agreed the workshop developed their skills of self-awareness, observation, non-verbal communication, sensitivity to emotions expressed by others, breaking bad news, communication with "difficult" patients, situational awareness, status awareness, teamwork, trust, presence in the moment, mindfulness, felt the exercises provided them tools to improve patient-physician and interprofessional communication, and enjoyed the experience.

Conclusions: An acting-based workshop is effective in improving communication and interpersonal skills as determined by self-evaluation, despite the use of masks. This holds relevance as residency programs adapt their curriculum to restricted learning modalities brought about by COVID.

OA1-1-2-60789

Action research for course transformation: from face-to-face to virtual CPD

Chloe Burnett University of Calgary, **Alanna Wall** University of Calgary, **Caitlin Ryan** University of Calgary, **Niamh Lyons** University of Calgary, **Rosario Villalobos-Gonzalez** University of Calgary, **Shannon Stucky** University of Calgary, **Melanie Planinsic** University of Calgary, **Dana Young** University of Calgary, **Sheila Sun Sun** University of Calgary, **Diane Simpson** University of Calgary, **Monica Rast** University of Calgary, **Rosanna Saavedra** University of Calgary, **Susan Limongiello** University of Calgary, **Elaine Chow Baker** University of Calgary

Background/Purpose: The COVID-19 pandemic prevented in-person gatherings, challenging traditional group learning methods of continuing professional development (CPD). In response, the University of Calgary's Office of CME&PD transformed its scheduled Fall 2020 courses to the online environment. This shift was a participatory and democratic process which allowed us to explore an action inquiry: "How do we best transform a CPD course into a virtual one?"

Methods: We used the action-reflection cycle of action research: planning, acting, observing and reflecting. The initial cycle included learning from education and tech guidelines, considering a participant view of course experience, creating a template of planning and delivering a virtual course, and then discussing and refining it. The second cycle included using the template to transform and run the first course in September 2020, then observing, debriefing and revising the template for use in the next course. This action-reflection cycle was repeated until the virtual course process became stable.

Results: The team engaged in the practical and collaborative process of course transformation. We held frequent meetings during each step of the action-reflection cycles. One distinct element of the practice was sharing personal reflections of the working progress, reflecting on individual and team values. Only through team efforts was the course transformation accomplished.

Conclusions: The pandemic dictated the need for transition to virtual courses in CPD. This shift, however, was not limited to solely exploring technical solutions.

Through systematic inquiries in meaningful educational practice the action research approach empowered us to create dialogical forms, which promoted team ownership of CPD excellence.

OA1-1-3-60058

Rapid Development of a COVID-19 Focused Curriculum to Prepare Psychiatry Residents for Acute Changes to Care

Natasha Snelgrove McMaster University, **Sheila Harms** McMaster University, **Jillian Lopes** McMaster University, **Anita Acai** McMaster University, **JoAnn Corey** McMaster University

Background/Purpose: The COVID-19 pandemic struck Canada in mid-March 2020, resulting in fears that a massive first wave might overwhelm the health care system. In teaching hospitals, plans to redeploy residents to needed services were quickly developed should they be needed. Many resident physicians had not recently worked in acute medical care units and expressed high anxiety about redeployment. There was also uncertainty about pandemic impacts on patient care.

Summary of innovation: The need to quickly develop a COVID-related curricular intervention and rapidly transition all learning online was clear. Three faculty educators developed a curriculum outline that was circulated to chief residents for feedback. Subsequently, three phases of curriculum were implemented: 1) primers on acute medical care and COVID, 2) sessions on providing psychiatric care during the pandemic, including effects on patient and provider wellbeing, and 3) sessions with a focus on healthcare needs of disadvantaged populations. Resident feedback was sought through evaluation forms and a focus group. Residents appreciated the rapid development of the curriculum to meet learning needs. Many noted a benefit of having these sessions early to better prepare them both practically and psychologically for changes to practice.

Conclusions: Our curriculum serves as an example of rapid curricular development to respond to a quickly developing learning need. Despite its quick development and implementation, a clear plan was developed, iterative feedback was sought during development, and evaluation of the curriculum occurred following delivery. This can serve as a model for other programs to use to rapidly develop local curricula in response to any rapidly developing need, including future pandemics.

OA1-1-4-60681

Entering Medical Students' Transition to PBL - an Enhanced (then Adapted) Curriculum

Jennifer MacKenzie McMaster University, **Lori-Ann Linkins** McMaster University, **Karen McAssey** McMaster University, **Robert Whyte** McMaster University

Background/Purpose: Problem Based Learning (PBL) pedagogy utilizes patient scenarios to stimulate students to link new knowledge to existing cognitive networks, reflect on/design learning objectives, research, and co-construct knowledge. PBL supports learning, retention, contextual transfer, self-directed learning, and cultural/ethical competencies. Primarily from traditional curricula, entering medical students' transition to PBL with its focus on collaboration, co-creation, and constructive cognitive conflict, compounded by lack of familiarity with PBL process and expectations, has resulted in anxiety and uncertainty. Therefore, a scaffolded introduction to PBL was introduced in 2019, and adapted to a remote platform in 2020.

Summary of innovation: Introduction to Medicine, added to McMaster's Undergraduate Medical curriculum, includes themes of: learning process, communication, professionalism, and wellness, based on stakeholder feedback, published/grey literature, and expert input. After an introduction and video modelling about PBL, 6-7 tutorial groups were placed in one classroom with 3-4 experienced tutors. One facilitator directed structure/debriefs for major steps in PBL process, scaffolded over 4 sessions. Objectives added included: self-reflection, participation, goal-setting, learning strategies, and feedback. The remote platform maintained the introduction, 2 facilitated sessions with break-out groups, addition of tutors and senior medical students aware of session objectives to each group, and redistribution of selected content to supporting curricula.

Conclusions: Feedback revealed accelerated growth in PBL skills. Students' affirming experiences included comparing objectives with other groups, clarifying challenges, improved cohesion, and reduced tension. Tutors reported shared understanding, improved consistency, validation, and real- time peer support. The addition of PBL tutors at the outset in 2020 was positive. Future directions include ongoing refinement of learning structure, integration of non-medical expert competencies, supporting curricula, and tutor roles.

OA1 – 2 Admissions Diversity

OA1-2-1-59906

Performance of Black and Indigenous applicants in the admissions process of a Canadian medical school

Katie Girgulis Dalhousie University, **Mohsin Rashid** Dalhousie University, **Andrea Rideout** Dalhousie University, **Katie Girgulis** Dalhousie University

Background/Purpose: Diversity in medical schools has lagged behind Canada's growing multicultural population. Dalhousie medical school in Halifax, Nova Scotia, Canada allows Black and Indigenous applicants to self-identify, and they are considered for admission based on meeting academic and non-academic requirements. Our aim was to examine how Black and Indigenous applicants performed and progressed through the admissions process compared to the Other group (applicants who did not self-identify).

Methods: Retrospective analysis of four application cycles (2015-2019) was performed. The Admissions Office provided de-identified demographic data and scores for Computer-Based Assessment for Sampling Personal Characteristics (CASPer), Medical College Admission Test (MCAT), Grade Point Averages (GPA), supplemental, discretionary, and Multiple Mini Interview (MMI), and total application.

Results: Of the 1322 applicants, 104 had identified as Black, 64 as Indigenous, and 1154 were Other. GPA was higher in the Other compared to the Indigenous group (p< .001). CASPer score was higher in the Other compared to the Black group (p= .047). There was no difference between groups for all other application components. A significant proportion of Black (51%) and Indigenous (42%) applications were incomplete. Acceptance rates were similar between all groups. Black applicants declined an offer of admission (31%) more than expected (p< .001).

Conclusions: Black and Indigenous applicants who completed their application progressed well through the admissions process. The pool of diverse applicants needs to be increased and support provided for completion of their applications. Further study is warranted to understand why a significant number of qualified applicants choose to decline an acceptance.

OA1-2-2-60320

Towards greater equity, diversity and inclusion in medical and health sciences studies in Quebec, Canada : Evaluation of the "Accès médecine et santé" pipeline program of Université de Montréal

Karina Cristea Université de Montréal, **Stéphanie Leboeuf** Université de Montréal, **Jean-Michel Leduc** Université de Montréal

Background/Purpose: "Accès médecine et santé" is a pipeline program that aims to demystify medical and health sciences studies for youth from multicultural and disadvantaged backgrounds. Our objective was to assess the program's impact on participants' perception of medical and health sciences studies.

Methods: An online survey was sent to former participants between 2014 and 2017 who had already completed their high school and college education. Sociodemographic information and data about perception of medical/health sciences studies were collected. Descriptive statistics were computed and frequency comparisons were made between pre/post answers for perceived barriers and enablers to university-level medical and health sciences studies using McNemar's test.

Results: Participation rate was 31.6% (n=154). Participants' ages ranged from 18 to 23 years (mean= 20.3 and median= 20) with 72.7% identifying as females. 51.9% of the participants were born outside of Canada, mostly in countries of the Maghreb (20.0%) and Sub-Saharan Africa (13.8%). More than half of the participants chose to pursue university medical or health sciences studies (58.9%). Participants reported that the program helped remove some of the barriers they perceived in undertaking medical and health sciences studies. Their fear of not being "good enough" to complete these studies decreased after their participation (p < 0.001). They also reported changes in their perception of these studies. After the program, they perceived them as being less competitive (p= 0.013), unbalanced (p = 0.013) and demanding (p = 0.021) than they did initially.

Conclusions: Our pipeline program reaches a very diverse group of students. The various activities seem to have a positive impact on participants' perception of some barriers related to health sciences and medical studies.

OA1-2-3-60645

Enhancing Equity, Diversity, and Inclusion in medical school admissions - the Schulich Medicine journey

Tisha Joy Western University

Background/Purpose: Medical schools aim to select and train future physicians representative of and able to serve the diverse Canadian population. Enhancing equity, diversity, and inclusion (EDI) in Admissions includes identifying and mitigating barriers for those underrepresented in medicine (URM).

Summary of innovation: In 2017, Schulich School of Medicine & Dentistry critically reviewed the general Admissions stream as interview invitations were primarily based on academic metrics rather than holistic review as in the Indigenous stream. Five key changes were introduced for the general stream: 1. A voluntary applicant diversity survey (ethnicity, socioeconomic status, and community size); 2. An Equity Representative; 3. A biosketch for applicants' life experiences; 4. Implicit bias training; and 5. A specific pathway for applicants with financial, sociocultural, and medical barriers (termed ACCESS pathway). Diversity data before (Class of 2022) vs. after (Class of 2024) these initiatives and of the applicant pool vs. admitted class were examined.

Conclusions: For the Class of 2024, the percentage of admitted racialized students (55.2%), those with socioeconomic challenges (32.3%), and those from remote/rural/small town communities (18.6%) reflected applicant pool demographics (52.8%, 29.9%, 17.2%, respectively). Additionally, 5.3% (vs. 5.6% applicant pool) of admitted students had applied through ACCESS. These data suggest that barriers for these URM populations were potentially mitigated by these initiatives. The initiatives also improved representation of racialized students (55.2% Class of 2024 vs. 45.3% Class of 2022), those with socioeconomic challenges (32.3% vs. 19.3%), LGBTQ2S+ (11.0% vs. 9.7%), and those with disability (4.5% vs. 2.4%), while informing future EDI enhancements.

OA1-2-4-60841

Structured File Review: Inter-rater reliability and impact on socioeconomic diversity

Saad Chahine Queen's University, **Tisha Joy** Western University, **Saad Chahine** Queen's University

Background/Purpose: In medical school admissions, autobiographical sketches and statements have been fraught with low reliability and concerns about an adverse impact on applicants with socioeconomic challenges. This study evaluated a recently implemented structured abbreviated autobiographical sketch (AABS) in Schulich Medicine Admissions in terms of reliability and effect on socioeconomic diversity of the incoming medical school class.

Summary of innovation: In 2018, the AABS was created to assess applicants' values and life experiences in relation to Schulich Medicine's four core values: 1. Teamwork and leadership; 2. Social accountability and social responsibility; 3. Respect for diversity, equity, and inclusion; and 4. Higher learning skills. Applicant AABS files (n=730) randomly distributed to physician and community member raters were scored using a structured tool. No other information (e.g. GPA, MCAT scores, full name, demographics) was provided to raters. In addition to implicit bias training, all raters received an unidentified test file to establish standardized statistical criteria for the need for an additional tie-breaker rater. Socioeconomic status using the AAMC parental education-occupation tool was captured through a voluntary diversity survey and available for 571 (78%) of the applicant files reviewed.

Conclusions: The reliability was high with a Generalizability coefficient of 0.93 and the variance of scores was primarily attributed to applicants (74%). Socioeconomic diversity of the applicant pool vs. admitted students was not statistically different (27.2% vs. 23.1%, p=0.31). Using a structured AABS tool in appropriately trained raters allows for high reliability and no significant impact on applicants with socioeconomic challenges.

OA1 – 3 Simulation

OA1-3-1-60723

Flipping the classroom never looked (or felt) so good.

Stephen Miller Dalhousie University, **Karen Bassett** Dalhousie University, **Lauren Duke** Dalhousie University, **Stephanie Rutherford** Dalhousie University, **Osama Loubani** Dalhousie University, **Ross Morton** Dalhousie University, **Jacquie Thillaye** Dalhousie University

Background/Purpose: March of 2020 brought Covid-19 and our Medical School curriculum to a halt. In many areas of teaching this had a significant impact on students' hands-on simulated learning. Our final musculoskeletal unit had a heavy hands-on experiential learning component that had to be re-envisioned in a novel way online.

Summary of innovation: Students do 12 simulated patient (SP) case practice sessions in Med 2 where they practice the history and physical examination assessment skills

they have learned in a particular component in a safe environment with immediate feedback from a highly trained SP. We developed an interactive series of cases to replace these hands-on sessions. We actually added value to the learning by adding sections on differential diagnosis, management plans, evidence-based practice guidelines, and disposition. Students worked through each part of an online interactive case supplemented with knowledge-based quizzes, multiple choice questions, and self-refection. One very unique aspect was mobilizing talents from our non-clinical staff at a very stressful time and coming together as a team to create unique, thought-provoking and challenging cases that reflected material learned online. Theater and performing arts background figured prominently in this case development.

Conclusions: Evaluation data from students was overwhelmingly positive. Students engaged with and enjoyed the interactive components which they felt challenged them and extended their learning. They requested more similar cases. Excellent and innovative teamwork of clinicians and non-clinicians in developing these cases was a great morale boost in a stressful time.

OA1-3-2-60852

Unpacking novice learners' experiences with cognitive load during simulation-based training

Faizal Haji Queen's University, **Heather Braund** Queen's University

Background/Purpose: Cognitive Load Theory (CLT) is a well-recognized instructional design framework. More research is required to clarify the extent to which instructional design features impact cognitive load and learning in simulated environments. This qualitative study describes medical students' experiences with cognitive load in a simulated learning environment. We identified sources of cognitive load, strategies for managing cognitive load, and the realism of the environment.

Methods: This study involved a secondary analysis of previously collected interview data. Medical students (n = 109) from two Canadian institutions participated in either 'simple' or 'complex' Lumbar Puncture tasks. Students engaged in repetitive trials interspersed with expert feedback. Semi-structured interviews were used to understand participants' experiences and strategies used to manage their cognitive resources. Data were analyzed thematically in NVivo.

Results: Five themes emerged, three of which are detailed below (due to space limitations). The first theme identified the sources of cognitive load, including purposefully embedded distractions (e.g. beeping), time constraints, and application of new knowledge without previous experience. The second theme described features that facilitated learning including ability to communicate with the patient, receiving feedback, and repetition. The third theme highlighted learners' load management strategies, including incorporating feedback, rehearsing next steps, self-talk, prioritizing, and ignoring distractions.

Conclusions: Participants were affected to varying degrees by purposefully integrated design features. Students described strategies used to manage their cognitive resources that have implications for learning outcomes. This study facilitated a better understanding of facilitators and challenges to learning experienced by novices training in a simulation environment informed by Cognitive Load Theory.

OA1-3-3-60817

The invisible work of Cadaver Based Simulation: An ethnography

Victoria Luong Dalhousie University, **Paula Cameron** Dalhousie University, **Anna MacLeod** Dalhousie University, **Molly Fredeen** Dalhousie University, **Olga Kits** Dalhousie University, **Lucy Patrick** Dalhousie University, **George Kovacs** Dalhousie University, **Jonathan Tummons**

Background/Purpose: Cadaver Based Simulation (CBS) is on the rise in Canada, due to recent advances in cadaveric preservation. However, the CBS literature tends to focus on perceptions of CBS and procedural performance. The complex work involved in CBS, particularly the invisible work of clinical cadaver staff, is little understood. This presentation therefore examines how cadavers, learners, workers, tools and spaces come together in a clinical cadaver program and offers implications for wider processes and discourses of simulation learning.

Methods: Our ethnographic methods (observation [n=30 hours], interview [n=30], document analysis [n=22]) allowed us to follow the cadaver before educational use (cadaver preparation), during (learning sessions with physicians, residents), and after (memorial service) over a two-year period (2018-2020) at Dalhousie University.

Results: Our analysis identified a complex work and educational "life cycle" of the cadaver, from its entrance into the body donation program through to burial and interment. This cycle is characterized by a series of transitions as cadavers pass through the hands of multiple actors. Some of these shifts were obvious (e.g., passing the threshold between home/hospital and morgue) and

others were subtle, rapid, and constantly changing (e.g., moving between person and tool).

Conclusions: Cadavers require a complex system of invisible work processes within and beyond the classroom. CBS requires workers and learners to navigate the tension between treating the body as an anonymous educational tool and as a specific, whole person. Better understanding this nuanced process may inform how we use cadavers in medical education.

April 17th, 2021 - 11:00 EST
OA2 – 1 Assessment & Entrustment
OA2-1-1-60879

Examining Myths in Assessment: An Opportunity to Advance Trustworthiness in Assessment

Carlos Gomez-Garibello McGill, **Maryam Wagner** McGill, **Valerie Dory**

Background/Purpose: The shift to CBME places a renewed emphasis on assessment. One challenge in this context is that there are myths that affect the trustworthiness of assessment use and interpretations. By identifying myths, we aim to: 1) improve understanding of diverse components of assessment; 2) raise awareness of how to address multiple interpretations emerging from assessment use; and 3) contribute to better assessment practices.

Methods: This presentation draws from a narrative review of the literature in Education and Health Professions Education to identify myths associated with assessment and uses analogies from Greek mythology to illustrate the underlying misconceptions.

Results: Four myths capture assessment misconceptions: i) Assessment development: Similar to the ancient Greeks who consulted the Oracle of Delphi to find THE truth, educators falsely hold the belief that there is a single best assessment framework. ii) Generation of information: Workplace-based assessment mistakenly assumes that raters - like Zeus - know everything about assessment including rating, and generating feedback, because of their clinical exertise. iii) Feedback: Clinical teachers assume that feedback always provides enlightenment to learners, just as Prometheus lighted man's world through fire. Unfortunately, learners will not always use feedback as intended. iv) Decision-making: Assessment using EPAs assumes that entrustment suggests competence. Like Janus, the Greek god that sees simultaneously into the future and the past, entrustability and competence may

be two aspects of learners' performance; they are not synonymous.

Conclusions: Examining these myths provides an opportunity for assessment users to adopt critical perspectives on assessment and provides avenues for advancing validation efforts to ensure that uses are supported.

OA2-1-2-60608

Variable meanings of entrustment - variable decision-making? How supervisors make procedural entrustment decisions in simulation- and workplace-based settings

Thurarshen Jeyalingam University of Calgary, **Catharine Walsh** University of Toronto, **Walter Tavares** University of Toronto, **Maria Mylopoulos** University of Toronto, **Kathryn Hodwitz** University of Toronto, **Louis Liu** University of Toronto, **Ryan Brydges** University of Toronto

Background/Purpose: Entrustment, a central construct in competency-based medical education (CBME), is operationalized in the assessment of entrustable professional activities (EPAs). While EPA assessment is foundational in many CBME systems, research has yet to clarify how supervisors form judgments when assessing EPAs in both workplace- and simulation-based settings. We aimed to explore the features supervisors report as influencing their entrustment decisions across these assessment settings.

Methods: We designed an interview-based, constructivist grounded theory-informed study involving gastroenterology supervisors and trainees. Supervisors completed separate EPA assessments of each trainee's endoscopic polypectomy (a relevant EPA) performance in both workplace- and simulation-based settings. Supervisors were interviewed after each to explore how they made their entrustment decision within and across settings. Transcribed interview data were coded iteratively using constant comparison to generate themes.

Results: Based on 14 interviews with 7 supervisors, we found that participants: 1) held multiple meanings of entrustment, both within and across participants, (2) expressed variability in how they justified their decisions, the related narrative, and numerical scoring, (3) held unique personal criteria for making decisions 'comfortably', and (4) perceived a relative freedom when using simulation to make entrustment decisions.

Conclusions: We found that participants spoke about and defined entrustment in a variety of ways, leading to variability in how they judged entrustment within and

across participants and assessment settings. The observed rater idiosyncrasies suggest residency programs cannot assume equivalence of EPA data from different assessment settings.

OA2-1-3-60055

Entrustment within an objective structured clinical examination (OSCE) progress test: Bridging the gap towards competency-based medical education

Samantha Halman University of Ottawa, **Angel Fu** University of Ottawa, **Debra Pugh** Medical Council of Canada

Background/Purpose: Progress testing aligns well with competency-based medical education (CBME) frameworks, which stress the importance of continuous improvement. Entrustment is a useful assessment concept in CBME models. However, very little is known about the role of entrustment in performance-based assessment. The purpose of this study was to explore the use of an entrustability rating scale within the context of an objective structured clinical examination (OSCE) Progress Test.

Methods: A 9-case OSCE Progress Test was administered to Internal Medicine residents (PGYs 1-4). Residents were assessed using a checklist (CL), global rating scale (GRS), training level rating scale (TLRS), and entrustability scale (ENT). Reliability was calculated using Cronbach's alpha. Correlations between scores using the different rating instruments were calculated. Differences in performance by training year were explored using ANOVA and effect sizes were calculated using partial eta-squared. Examiners completed a post-examination survey.

Results: 91 residents and 42 examiners participated in the OSCE. Inter-station reliability was high for all instruments (0.74 to 0.83). There was an overall effect of training level for all instruments ($p < 0.001$). Effect sizes were large. 88% of examiners completed the survey. Most preferred the ENT over other scales. Most (64%) indicated feeling comfortable in making entrustment decisions during the OSCE.

Conclusions: Entrustment scores were found to have high reliability and demonstrated significant differences in OSCE performance by level of training. This supports the incorporation of entrustment scales in OSCE progress tests.

OA2-1-4-60757

How clinical supervisors conceptualize entrustment in procedural training: A qualitative study of entrustment decision-making in endoscopic training

Thurarshen Jeyalingam University of Calgary, **Ryan Brydges** University of Toronto, **Shiphra Ginsburg** University of Toronto, **Graham McCreath** University of Toronto, **Catharine Walsh** University of Toronto

Background/Purpose: While entrustment is a central assessment construct in competency-based medical education (CBME), the factors clinical supervisors consider in entrusting procedural skills and how they report synthesizing these factors into their final decision has not been clearly elucidated. We aimed to characterize this process using gastrointestinal endoscopy as a model procedure.

Methods: Using methods from constructivist grounded theory, we interviewed 29 endoscopic supervisors from across North America in pediatric and adult gastroenterology, general surgery, and family medicine. Interviews focused on how supervisors make endoscopic entrustment decisions and which factors they consider in this process. Transcripts were analyzed using constant comparison to generate themes and an explanatory framework.

Results: Twenty-nine supervisors were interviewed. Participants conceptualized entrustment as a continuum (vs. a binary decision) and perceived their decision could fluctuate over time. That is, they reported their judgements were influenced by both dynamic factors, which change day-to-day, and by static factors, which persist over time. In their final entrustment decision, participants perceived synthesizing various dynamic factors (patient acuity, procedural risk, time constraints, etc.) against their personal baseline informed by static factors (institutional culture, legal considerations, etc.).

Conclusions: Procedural entrustment appears to be a complex cognitive process involving multiple dynamic factors synthesized against a baseline of static factors. CBME programs will benefit from understanding how this synthesis of factors influences faculty judgments, trainee learning, and program decision-making.

OA2 – 2 CPD

OA2-2-1-60485

An online CPD program on keeping medical records using a serious gaming approach. You can't be serious, right?

Martin Tremblay Fédération des médecins spécialistes du Québec, **Sam Daniel** Fédération des médecins spécialistes du Québec, **Beatriz Merlos** Fédération des médecins spécialistes du Québec, **Bruno Vaillancourt** Fédération des médecins spécialistes du Québec

Background/Purpose: About 25% of physicians in Quebec do not create and maintain medical records properly according to our physician professional order (CMQ). Our organization had to develop an educational intervention to address this important unperceived gap, which was judged uninteresting as per participants.

Summary of innovation: We created a 1.5-hour online knowledge self-assessment program. Coached by Hippocrates himself; participants must solve various vignettes developed from CMQ's medical record keeping regulations. A validated questionnaire based on the Theory of Planned Behavior was used to measure participants' behavioral intention post intervention. Launched in March 2016, 180 specialist physicians have registered to this course (completion rate: 74%). Participants agreed or totally agreed that a serious gaming approach was appropriated for this topic (95%) and all reported that this course met their learning objectives. Self-reported confidence to respect good practices in record keeping increased by 21%. 97% of the participants would participate again in a serious gaming CPD activity. A mean CPD REACTION score of 6.2/7 indicated that the program was efficient to promote participants' intention to respect good practices in record keeping. From the early development phase, we knew that meaningful vignettes were required to maintain participants' engagement. A CMQ representative was involved in the development of real-life scenarios. We also created a short humoristic and appealing video to facilitate recruitment.

Conclusions: Using a serious gaming approach for this program convinced our organization that taking an unconventional educational path with our learners is feasible. We are now exploring broader instructional design avenues for upcoming programs.

OA2-2-3-60483

Interdisciplinary Continuing Professional Development in Time of Sanitary Crisis; is it Working?

Martin Tremblay Fédération des médecins spécialistes du Québec, **Sam Daniel** Fédération des médecins spécialistes du Québec, **Diane Francoeur** Fédération des médecins spécialistes du Québec

Background/Purpose: Among the highest incidence per 100,000 cases in the world, the province of Quebec was severely affected by the COVID-19 pandemic. Our organization had to provide continuing professional development (CPD) to meet the needs of medical specialists from 35 affiliated medical associations representing 59 distinct medical specialties.

Summary of innovation: We conceived and implemented a structured process to identify and address perceived, unperceived, societal, and normative CPD needs. 26 webinars were organized in 16 weeks (March to June 2020). Each 1-hour event included a weekly update from our president, presentation from a panel of 2 to 5 experts from our affiliated medical associations, followed by a period of Q&As. All 7 CanMEDS competencies were covered during this series of webinars. This series has attracted over 35,100 participants, including medical specialists (89%), family physicians (10%) and other healthcare professionals (1%). More than 4,200 questions were asked to the experts. Unanswered questions were analyzed, grouped, and answered. Participants agreed or strongly agreed that these interdisciplinary webinars met their learning objectives (96%) and were pertinent for their practice (95%). These interdisciplinary webinars were implemented weeks prior to COVID-19 hospitalization peak. They have attracted medical specialists from all our 35 affiliated medical associations (including 85% of all medical specialists in Quebec). CPD needs changed very rapidly during the sanitary crisis, and the responsiveness of our needs assessment strategy was key to keeping our events relevant, as evidenced by sustained participation.

Conclusions: The success of this series of webinars showcased that large scale interdisciplinary CPD is feasible with medical specialists. Our needs assessment strategy can easily be adapted to other situations where a rapid response is required to address ever changing CPD needs.

OA2-2-4-60272

Representations of Administrative Staff and Faculty over 50 Years of Reports from the Dean

Morag Paton University of Toronto, **Stephanie Waterman** University of Toronto, **Cynthia Whitehead** University of Toronto, **Ayelet Kuper** University of Toronto

Background/Purpose: Language and representation matter. For a century, the Faculty of Medicine at the University of Toronto has produced an annual report from the Dean, discussing issues, showcasing successes and acknowledging community members. Reports traced the faculty through war, depression and the introduction of socialized medicine. Included in those narratives are the people who work within as staff members and teachers, researchers, and leaders.

Methods: This study forms the beginning of my doctoral research employing Foucauldian discourse analysis to explore how administrative staff have been and continue to be represented across three departments in the Faculty. Fifty years of digitalized Reports from the Dean (1920s-70s) form the archive and were reviewed, coded in NVivo12, and analyzed.

Results: Staff and Faculty have been written about differently and this changes over time. Staff representations are minimal with specifically-named staff mentioned rarely. This is juxtaposed by the heavy focus on named Faculty members. Staff are constructed in various ways, often using aspects of their personalities (e.g. "cheerful"). In contrast, faculty are more often constructed by accomplishments. Female faculty members are described using language much closer to descriptions of the largely feminized staff cohort (e.g. "delightful") indicating that this is gendered.

Conclusions: Discourses employed in the Reports create a number of 'truth statements' - Staff can be recognized but rarely named, cheerful but not accomplished. Female faculty can be delightful. These statements hint at possible discourses that govern what can be said or not said of staff and faculty and provide a glimpse of the differential power ascribed to these groups. Further phases of this research will further explore the discourses that govern this differential power and explore discourses that continue to regulate the work of and power relations between administrative staff and faculty in health professions education.

OA2 –3 Inter-professional Education

OA2-3-1-60858

Conference on Health Advocacy Toronto: Building a national academic forum and community of practice for health advocacy in Canada

David Wiercigroch University of Toronto, **Hilary Pang** University of Toronto, **David Wiercigroch** University of Toronto, **Jennifer Hulme** University of Toronto

Background/Purpose: Advocacy is an important educational competency in medical training as physicians are well-positioned to champion innovative solutions to health and health care challenges. Academic forums are important facilitators of knowledge exchange, skill development and networking, however such opportunities focusing on health advocacy are limited. The Conference on Health Advocacy Toronto (CHAT) was founded with the mission to recognize and share health advocacy work at the local, provincial, and national level and the vision of creating conversations among health care stakeholders.

Summary of innovations: CHAT was a full-day conference developed by a team of eight medical students which featured a keynote address, two oral presentation sessions, and two advocacy skill-building workshops. Due to COVID-19, CHAT 2020 was reconfigured and delivered virtually using Zoom within three weeks of the event prompting a 4.5-fold registration increase. A total of 180 individuals attended; participants included health professions students, graduate students, and physicians from eight provinces. Thirty-eight initiative and research abstracts were accepted for presentation. All survey respondents (n=23) rated each session they attended as 'excellent' or 'good' on a 5-point Likert scale. Participants expressed a desire for additional events related to health advocacy in the future.

Conclusions: CHAT is a novel pan-Canadian academic forum in health advocacy which fosters knowledge sharing and mentorship. The event has provided a launching point for a national network and community of practice for trainees and health care professionals. Future directions should include a needs assessment of the community to inform future programming.

OA2-3-2-59949

Battling the Burnout Epidemic: An Interprofessional Approach to Improving Student and Healthcare Provider Wellness

Claire Bullock Dalhousie University, **Kathleen MacMillan** Dalhousie University, **Claire Bullock** Dalhousie University, **Lauren Miller** Dalhousie University, **James MacMillan** Dalhousie University, **David Neeb** Dalhousie University, **Angela Tsai** Dalhousie University, **Wolim Lee** Dalhousie University, **Stephen Miller** Dalhousie University, **Kelly Lackie** Dalhousie University

Background/Purpose: Healthcare provider (HCP) wellness is an area of increasing concern often only discussed in a uniprofessional context. This approach fails to take into consideration how the function of interprofessional (IP) teams contributes to and is impacted by team members' mental health.

Summary of innovation: An IP group of students from Dalhousie University developed an Interprofessional Education (IPE) Mini-Course. This course educated students about wellness-related challenges faced by HCPs and students. The course had three in-person sessions. Session One introduced phenomena such as burnout and compassion fatigue and available supports. Session Two addressed the role of IP collaboration in HCP wellness, focusing on mental health and professionalism. Finally, students applied course content in simulated scenarios. This session also focused on resilience strategies. This mini-course received funding to be offered in 2019 & 2020.

Conclusions: Data surrounding participants' understanding of IP collaborative competencies was collected using questions from the validated Interprofessional Collaborative Competencies Attainment Survey (ICCAS) tool and a program evaluation survey that required students to reflect on their resilience and interprofessional abilities. ICCAS and the program evaluation questions were combined into a single survey. This survey was completed by 40/50 of students in 2019 who participated in the course and has been analyzed using a two-tailed t-test. Many survey results were statistically significant, including students being better able to identify resources to provide mental health support ($p=0.001$). These findings helped confirm our hypothesis that after completing Battling the Burnout, students were better recognized that HCP wellness is a challenge for all professions.

OA2-3-3-60870

Collaboration, Communication, and Counselling: Incorporating Allied Health Professionals into Curriculum Development in a Medical Genetics Residency Training Program

Joanna Lazier University of Ottawa, **Claire Goldsmith** CHEO, **Alison Castle** University of Ottawa, **Alison Castle** University of Ottawa

Background/Purpose: Team-based care is known to be integral to improving patient outcomes and safety. Many studies outline the importance of interprofessional education in training collaborative care providers, but there are few formalized curricula that incorporate allied health professionals in longitudinal residency training. There are no such curricula in Medical Genetics programs in Canada, despite there being extensive overlap between objectives of training for Genetics residents and the scope of practise of Genetic Counsellors (GCs). In Ottawa, residents work closely with GCs but not all trainees have equal experiences. As such, our program sought to augment resident education and develop new evaluation methods.

Summary of innovations: Pre-existing GC-led educational opportunities were identified. Information was solicited about similar opportunities across Canada. Residents, Geneticists, and GCs helped create level-of-training-based expectations. We designed a novel GC-led longitudinal curriculum to improve resident counselling skills, foster positive professional relationships between Geneticists and GCs via a mentorship program, and introduced novel evaluation methods transferable to a CBD model of training. The curriculum aligns with the six interprofessional competencies developed by the Canadian Interprofessional Health Collaborative. In July 2019, it was implemented with the current resident cohort. Feedback to date from educators and trainees is overwhelmingly positive and we have already seen the benefits of a more collaborative environment.

Conclusions: As CBD is implemented, use of allied health professionals as resident educators will be essential. This project has shown that it is appropriate and feasible to use our colleagues' skills to maximize resident education and train collaborative care providers.

OA2-3-4-60857

Getting them to the table: Engaging inter-professional team members to talk about their workplace practices

Ryan Brydges St. Michael's Hospital, Unity Health Toronto, **Lori Nemoy** St. Michael's Hospital, Unity Health Toronto, **Kristen Sampson** St. Michael's Hospital, Unity Health Toronto, **Christine Léger** St. Michael's Hospital, Unity Health Toronto, **Nazanin Khodadoust** St. Michael's Hospital, Unity Health Toronto, **Douglas Campbell** St. Michael's Hospital, Unity Health Toronto

Background/Purpose: We developed a novel tabletop simulation approach to identify workplace practices and intrapartum care providers' underlying rationales for how they work through challenging interprofessional clinical scenarios. These simulations also contributed data to an institutional ethnography exploring the ruling relations influencing workplace practices on the labour and delivery (L&D) unit.

Summary of innovation: We combined 'think-aloud' and simulation principles to design an approach for eliciting healthcare professionals' descriptions of how they collaborate in their work on a L&D unit, and their rationalizations for why they work that way. We engaged an interprofessional team of intrapartum clinicians, researchers, and simulation experts to design three tabletop simulation scenarios reflecting key challenges identified from analyzing incident analysis reports (n=81), field observations (75 hours), and semi-structured interviews (n=15). We ran each scenario three times with three separate teams of interprofessional clinicians from the unit.

Conclusions: The tabletop simulations revealed 'disjunctures' in how different professionals interpreted and adhered to key policies and procedures. These scenarios allowed us to examine longitudinal work processes in a condensed timeline, with opportunities to pause and probe, and with reduced focus on individual practitioner's competence. Moreover, participants described how the scenarios opened a productive dialogue between professional groups and suggested this simulation-based approach might contribute to enhanced interprofessional understanding and cultural change. Our innovative tabletop simulations produced rich data about what drives professionals' actions in veritable clinical cases, improved their engagement in change processes, and laid the foundation for informed change of policies and practices on the unit.

OA2-3-5-60786

Intraoperative Communication Between Residents and Staff Physicians During Awake Patient Surgery

Lorelei Lingard Western University, **Yiannis Iordanous** Western University

Background/Purpose: In a teaching environment, effective communication is important for patient safety and resident learning; however, little is known about how that communication is affected by the listening patient. The purpose of this study was to examine the patterns of communication between consultant physicians and residents during procedures where patients are awake.

Methods: This was a qualitative constructivist grounded theory study. Various pairings of ophthalmology residents and staff physicians were observed in the cataract surgical suite. Following several observed cases, semi-structured interviews were conducted.

Results: The theme of "concealment" was prevalent in most interviews. Much of the language and communication used in the operating room had the purpose of concealing the residents' level of participation in the surgery. The rationale reported for concealing the residents' participation was to not induce patient anxiety and to allow for more resident participation in surgery. Several communication techniques and linguistic strategies were observed in support of concealment. These techniques and strategies facilitated guiding and teaching residents while making the residents' presence and involvement in surgery less apparent to the patient undergoing surgery.

Conclusions The presence of an awake patient presents challenges for teaching residents. Various verbal and non-verbal techniques are utilized to help ease patient anxiety while concealing the residents' involvement in the surgery. The value of identifying and labelling these techniques is that staff surgeons can be more purposeful and explicit with residents about how they will handle the staff-resident communication in the presence of an awake patient, which could help to minimize the potential for ambiguity and misunderstanding.

April 17th, 2021 - 12:00 EST
OA3 – 1 Postgraduate

OA3-1-1-60497

A Signal: Resident Perspectives on Decision-Making Processes and Impacts of Back-up Call Activations in an Internal Medicine Residency Program

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Background/Purpose: Residency programs rely on jeopardy or back-up call systems to address gaps in coverage when a resident cannot complete their call shift. Residents' perceptions on underlying motivations for activating back-up, and how these decisions vary by context, remain unknown. The authors explored residents' reasons for call activations and impacts of the back-up call system on education and burnout.

Methods: Eighteen semi-structured one-on-one interviews were conducted from September 2019 to February 2020 with internal medicine and chief medical residents from the University of Toronto. Interviews explored participants' experiences and perceptions with call activations. A constructivist grounded theory approach was used to develop a conceptual understanding of the back-up system as it relates to residents' decisions underlying activations, downstream impacts and relationships to burnout.

Results: Residents described a complex thought process when deciding whether to activate. Decisions were coloured by inner conflicts including sense of collegiality, need to maintain an image, and time of year balanced against self-reported burnout. Residents described how back-up models can inherently perpetuate burnout, lowering thresholds to trigger activations. Impacts included anxiety of not knowing whether an activation would occur, decreased educational productivity from exhaustion and the "domino effect" of increased workload for colleagues.

Conclusions: Residents weigh inner tensions when deciding to activate back-up. Their collective experience suggests that burnout is both a trigger and consequence of back-up call activations, creating a cyclical relationship. Escalating rates of call activations may signal that burnout amongst residents is high, warranting further exploration from educational leads.

OA3-1-2-60644

Coaching for Performance Change: The development and evaluation of a longitudinal Academic Coaching Program for Competency-Based Medical Education residents in anesthesiology

Brittany Prevost University of Toronto, **Alayne Kealey** University of Toronto

Background/Purpose: The shift to competency-based medical education (CBME) provides trainees with increased frequency of workplace-based assessments and feedback conversations. In this new context, coaching has gained significant attention as one method to promote self-reflection and personalized goal setting with postgraduate learners. The R2C2 model, is a 4-step evidence-based guided reflection model for longitudinal coaching: RELATIONSHIP building, exploring REACTIONS to feedback data, discussing feedback CONTENT, and COACHING for performance change.

Summary of innovation: In 2018, a longitudinal Academic Coaching Program (ACP) was developed for CBME anesthesiology residents at the University of Toronto. Each resident was paired with a volunteer faculty anesthesiologist, and all pairs were provided with coaching tips and the R2C2 framework. Resident and faculty participants were surveyed about their use and perceptions of the program at one and two years after implementation. Using a quality improvement (QI) lens, survey data then directed iterative adjustments to the program.

Conclusions: Surveying ACP participants has highlighted improvement opportunities. Resultant adaptations have included developing a resident-facing dashboard for enhanced access to assessment data, creating a worksheet to guide meeting structure, and ensuring protected resident academic time. Additionally, the survey responses on use data suggest residents steadily progress through the R2C2 stages. Responses sorted by postgraduate year demonstrated a progression from relationship building in early residency towards exploring and using assessment data to coach for change in later training. Our program can serve as one example of integrating the R2C2 model for longitudinal coaching, and how to iteratively improve a coaching program with a QI strategy.

OA3-1-3-60728

Practicing confidence: An autoethnographic exploration of the first year as a physician

Andrew Perrella McMaster University, **Glenn Regehr** University of British Columbia , **Laura Farrell** University of British Columbia , **Alon Coret** University of Ottawa

Background/Purpose: Across Canada, July 1st is heralded with the arrival of a cohort of newly-minted medical graduates. Through intense residency training and supervision, these learners gradually develop self-assurance in their newfound skills and ways of practice. What remains unknown, however, is how this confidence develops. The following project seeks to provide an insider view of this evolution from the frontline experiences of resident doctors.

Methods: Using an analytic auto-ethnographic approach, two resident physicians (internal medicine, pediatrics) documented 43 real-time stories on their emerging sense of confidence over their first year of residency. A narrative analysis was conducted iteratively in partnership with a staff physician and a medical education researcher, allowing for robust multi-perspective input. Reflections were analyzed and coded thematically; the various perspectives on data interpretation were negotiated by consensus discussion.

Results: Our analysis focused on the evolution of confidence, which starts with initial experiences of apprehension and the notion of 'faking it.' With time, the act of confidence materializes through two processes: (1) routinization and normalization; and (2) coming to understand our place within a layered healthcare system. Importantly, the development of confidence does not follow a linear trajectory; rather, the trainee finds themselves oscillating between states of imposterism, frustration, self-defeat, and self-assurance.

Conclusions: Exploring the nature of confidence - a seldom discussed but critically valued piece of one's emerging physician identity - offers unique insights on residency training, and provides key perspectives on the ways in which residents' growth and learning can be best supported.

OA3-1-4-60877

Practice Intentions and Practice Choices of Early Career Physicians in Canada

Monica Aggarwal University of Toronto, **Ivy Oandasan** The College of Family Physicians of Canada, **Alix Holtby** The College of Family Physicians of Canada, **Mahsa Haghighi** The College of Family Physicians of Canada, **Dragan Kljujic** The College of Family Physicians of Canada, **Lorelei Nardi** The College of Family Physicians of Canada

Background/Purpose: One of the key foci for medical education other than ensuring competence is influencing the choices of learners in relation to their specialty, scope of practice and location of practice. These choices have implications for workforce planning. The purpose of this study was to compare practice intentions of exiting family medicine (FM) graduates with practice choices made by early career family physicians (FPs) related to scope of practice and factors that influenced their choices.

Methods: Using Family Medicine Longitudinal Surveys (FMLSs), aggregate-level secondary data and thematic analysis on responses to two partially open-ended questions was conducted for FM residents that exited residency in 2015 (n=632, RR=54.3%), 2016 (n=785, RR=60.1%) and early career FPs (first 3 years in practice) in 2018 (n=206, RR=17.2%) and 2019 (n=357, RR=23.7%).

Results: In both cohorts, there were statistically significant declines in the proportion of FPs reporting involvement in various activities in relation to their scope of practice compared to their practice intentions. The greatest declines were seen in long-term care facilities, rural communities, emergency departments, intrapartum and indigenous care. System, organizational and personal factors were identified as reasons for not undertaking these activities.

Conclusions: Practice choices do not match practice intentions of early career FPs. Medical education may influence the intentions and choices of graduates however factors outside of medical education influence what they actually do. Knowledge of the factors that influence practice choices will assist workforce planners, medical educators and stakeholders to support opportunities for FPs as well as address social accountability and access to care.

OA3 – 2 Navigating & Accessing Care

OA3-2-1-60578

Accessibility and equity in health and human service educational programs: What are the best instructional practices in fieldwork education?

Tal Jarus University of British Columbia, **Elisabeth Gross** University of British Columbia , **Fernanda Mira** University of British Columbia , **Shahbano Zaman** University of British Columbia , **Yael Mayer** University of British Columbia , **Laura Bulk** University of British Columbia , **Earllene Roberts** University of British Columbia , **Margot Young** University of British Columbia , **Rosemary Lysaght** Queen's University, **Donna Drynan** University of British Columbia

Background/Purpose: Students with disabilities (SWD) experience systemic ableism, especially in health and human service (HHS) programs, where they must demonstrate competencies in both academic and clinical contexts. Specifically, SWD in HHS programs face barriers including lack of support, discriminatory program design, and stigmatization (Bulk et al., 2017; Easterbrook et al., 2015; Easterbrook et al., 2018). Further, educators and clinicians often lack understanding regarding such barriers and the consequent supports SWD need, particularly in fieldwork education (Bulk et al., 2017; Easterbrook et al., 2015). This study explored the current HHS programs' practices for supporting SWD in fieldwork education.

Methods: Eighty-two SWD, 23 academic coordinators, and 184 fieldwork educators completed tailored surveys. Nine students and 5 academic coordinators participated in follow-up interviews. Participants represented 15 UBC HHS programs, and 14 Occupational Therapy programs across Canada.

Results: Results revealed barriers and gaps in accessibility practices in fieldwork education. Reasons for students not receiving FW accommodations included cumbersome accommodation processes, attitudinal barriers, restrictions placed on programs by certification bodies, and complexities of constant change in fieldwork. Results also showed significant administrative gaps, such as lack of student and coordinator education on accommodation policies, inadequate time for preparation and collaborative planning, and student concerns regarding the use of ineffective accommodations. Notably, evaluation processes for assessing the effectiveness of accommodations appeared non-existent among the programs surveyed.

Conclusions: Results have implications for developing clear and effective resources and practices for supporting SWD in fieldwork, ultimately ensuring implementation of policies and strategies effective in promoting equity and diversity in HHS programs.

OA3-2-2-60751

Elements Leading to Discharge Decisions in Ambulatory Internal Medicine Clinics

Sheliza Halani University of Toronto, **Lindsay Melvin** University of Toronto, **Rodrigo Cavalcanti** University of Toronto

Background/Purpose: Building competence in the ambulatory setting is a key element to Canadian Internal Medicine (IM) residency training. An existing gap in the medical education literature is how to teach learners on appropriately discharging patients from clinic to their primary care providers. To define this competency of discharge from IM clinics, we sought to understand how practicing physicians engage in discharge decision-making in the outpatient setting so as to inform development of teaching frameworks.

Methods: We purposively sampled staff general internists who practice in the ambulatory clinic from six academic hospitals in Toronto. Twenty-three semi-structured interviews were conducted from October 2019 to January 2020. Data collection and analysis were iterative with constant comparison according to constructivist grounded theory.

Results: The themes identified include: 1) Stability of the medical condition, 2) Accessibility of appropriate care, 3) Individual physician factors including risk tolerance and experience, 4) Models of care including clinic structures, and 5) Individual patient factors including frailty, comorbidity burden, and vulnerability. Discharge from clinic involved a discussion between the internist and the patient with an "open-door" policy at the time of discharge. Trainee education around these decisions is informal and often relies on role modelling and supporting trainee independent decision-making under guidance.

Conclusions: The critical elements that influence general internists' discharge practices from ambulatory clinic are centred around the value added to a patients' care. We propose that these elements can be synthesized into a framework for educating trainees regarding transitions of care decisions in ambulatory Internal medicine.

OA3-2-3-60532

Rethinking "The [Past] Medical History": An Exploration of Patient Networks of Care Providers

Laurent Perrault-Sequeira Western University, **Jacqueline Torti** Western University, **Andrew Appleton** Western University, **Maria Mathews** Western University, **Mark Goldszmidt** Western University

Background Purpose: Patients' networks of care providers have largely been ignored in current models of history taking. That each patient relies on a family physician who helps them navigate the healthcare system is largely assumed. For many hospitalized patients -especially those with multi-morbidity -this may not accurately reflect their reality. Moreover, failing to consider alternative care networks could lead to inadequate care planning.

Methods: Prospective cohort study with data collection and analysis informed by constructivist grounded theory methodology. Data included interview transcripts from 30 patients admitted to an inpatient internal medicine service of an urban academic health centre. Analysis and data collection proceeded in an iterative fashion with sampling progressing from purposive to theoretical.

Results: We found a complex interplay among the types of family physician relationship (highly involved, less involved, non-existent), specialist relationship(s) (highly involved, consultative, fragmented), and patients' personal abilities/social supports. These configurations appeared to impact how each cared for self and navigated the healthcare system. Those with less optimal combinations described many challenges during transitions in medical care arising from hospital admission, new diagnoses, increasing medical complexity, and changes in functional ability.

Conclusions: Our elaboration of the multiple configurations of care networks has implications for teaching history taking. Adapting history taking to more effectively identify care networks can help guide discharge and ongoing care planning for high risk patients. Doing so requires moving from "past medical history" to "chronic active issues," and exploring the associated network of care providers and social context.

OA3-2-4-60657

Community Perspectives: Results from Community Partners' Formal Review of the Service Learning Program for Undergraduate Medical Students

Karen Cook University of Manitoba, **Chelsea Jalloh** University of Manitoba, **Nina Condo** Elmwood Community Resource Centre - Service Learning Site, **Felicien Rubayita** Manitoba Interfaith Immigration Council - Service Learning Site, **Ian Whetter** University of Manitoba, **Roger Berrington** CanU Canada - Service Learning Site

Background/Purpose: In 2016, Service Learning became a curricular requirement for undergraduate medical students at the University of Manitoba. Since that time, significant feedback has been collected from students re: their Service Learning experience. While many community contacts who work with these students regularly provide informal feedback to the university, this survey collected systematic feedback from community partners involved with Service Learning.

Methods: In June 2019, a survey was distributed to 36 organizations to seek feedback about their experiences working with Service Learning students. Participation in the survey was voluntary. In total, 27 organizations participated.

Results: Respondent feedback could be grouped into two main themes: Logistics, and the Service Learning Experience. About half (52%) indicated it was "easy" to schedule students for Service Learning; however, students' busy schedules and differences between hours of organization programming and students' availability were identified as considerations. Most respondents described students as "engaged" (70%) or "somewhat engaged" (26%) in their Service Learning experiences. Sixty-eight percent of respondents indicated Service Learning raised students' understanding of power and privilege, and systemic oppression.

Conclusions: Seeking feedback from community partners involved with Service Learning provided valuable insights to inform and improve the Service Learning program. Results identified specific areas of the program and logistic improvements to be addressed moving forward. Ensuring processes are in place to obtain feedback from community organizations is an important step to strengthen reciprocal, working relationships between community organizations and university. Doing so enhances the Service Learning experience for both students and community partners.

OA3–3 Teaching & Learning -Post graduate

OA3-3-1-60935

Adapting the Motivated Strategies for Learning Questionnaire for use with postgraduate medical education learners

Cassandra Pirraglia University of Alberta, **Alexandra Aquilina** University of Alberta, **Shelley Ross** University of Alberta

Background/Purpose: The Motivated Strategies for Learning Questionnaire (MSLQ) has been widely used in educational psychology literature to examine the motivation and learning of high school and undergraduate students, and is beginning to appear in health professions education (HPE) research. However, HPE programs are contextually different from the education environments where the MSLQ was validated. Further, the few studies reporting validation of adapted MSLQ items for HPE learners have focused on undergraduate contexts. The purpose of the current study was to describe the adaptation of MSLQ items for use with postgraduate medical education (PGME) learners.

Methods: MSLQ items for intrinsic motivation, metacognitive self-regulation, and critical thinking were initially reworded using a consensus panel approach with experts in PGME. The adapted items were then administered through either paper or online surveys to family medicine residents in two programs. Learners identified problematic items by commenting on the survey and/or highlighting or underlining words or phrases (paper only). Three focus groups were conducted with PGME learners to discuss the problematic items. The sessions were audio-recorded and transcribed. Deductive thematic analysis was undertaken separately by two researchers.

Results: Results indicated that the terminology on the MSLQ did not readily transfer to the PGME context, as specific words took on different meanings in PGME clinical training contexts. Recommendations for the rewording of items were provided by focus group participants.

Conclusions: Our results provide insights into how the MSLQ may be adapted for use with PGME learners to further understand this population's motivational orientations and learning strategies.

OA3-3-2-59989

Implementation of a pilot financial/practice management curriculum in a family medicine training program

Matthew Lee Western University, **Lawrence Yau** Western University, **Ada Gu** Western University, **Karan Chawla** Western University, **Adrienne Wakabayashi** Western University, **Daniel Grushka** Western University

Background/Purpose: Throughout residency, trainees must make many financially important decisions. Despite this, very few training programs provide formal education for residents around financial literacy, an important component of practice management. The purpose of the project was to implement a practice management and financial literacy curriculum.

Summary of innovation: A survey with a five-point Likert scale and multiple focus group interviews were conducted to evaluate the needs of the family medicine cohort during the 2019-2020 academic year at Western University. A pilot curriculum was then implemented during the spring term, and was followed by a post-intervention survey. The core concepts for the practice management curriculum included transition to practice, financial planning, billing, and family practice models. The curriculum framework was delivered by family physicians, with a combination of didactic lectures and panel discussions.

Conclusions: 46 participants surveyed prior to the intervention indicated a value of 2.89/5 for their comfort level with how the program had prepared them for practice management. Key themes generated from the qualitative survey included a lack of comfort with their own knowledge, a lack of financial education provided by the residency program, and a strong belief that the program should provide training in financial education and practice management. Following the implementation of the curriculum, the comfort level for participants improved to 3.15/5 indicating a self-perceived need for practice management and financial literacy education among family medicine residents. These findings will aid in the continual evolution of a practice management/financial literacy curriculum for other residency programs.

OA3-3-3-60721

[Typologies & Challenging Conversation Foci: A Novel Model for Facilitating the Successful Resuscitation Preference Conversation](#)

Kristen Bishop Western University, **Ravi Taneja** Western University, **Mark Goldszmidt** Western University, **Hasan Hawilo** Western University

Background/Purpose: Effective communication lies at the heart of successful resuscitation preference conversations (RPC); however, existing RPC resources are largely based on expert opinion and take a one-size fits all approach. This lack of insight into the complexity of RPCs represents a significant gap leading to inadequate preparation of our clinical trainees. This qualitative study sought to develop a typological understanding of the diversity of RPCs clinicians may find themselves in.

Methods: Constructivist grounded theory was used to develop an understanding of the complex social processes involved in RPCs. Theoretical and purposive sampling was used to identify and select 106 rich patient narratives capturing the full spectrum of RPCs in our dataset. The team ensured our approach's trustworthiness and rigour through constant comparison, consultation of the empirical literature, and regular team examination of cases.

Results: In total, we identified: (a) 11 typologies, which reflect the RPC's overarching narrative (i.e., what defined or was at the heart of the conversation), and (b) 8 categories of challenging conversation foci, which represent other important RPC themes that went beyond the standard descriptions found in most resources. Typologies could be further categorized as barriers, facilitators, and modifiers of the RPC based on how they shaped the conversation.

Conclusions: Holding an effective RPC requires a rich understanding of the multiple conversation typologies and challenging foci that can be explored. The developed model can be used to help clinicians and trainees to learn and improve how they handle RPC.

OA3-3-4-60914

[Shared Screens: Resident Perspectives of Virtual Academic Half Day](#)

Basil Kadoura University of British Columbia, **Michaela Remington** University of British Columbia , **Brett Schrewe** University of British Columbia, **Matthew Carwana** University of British Columbia

Background/Purpose: The COVID-19 pandemic has significantly disrupted the postgraduate learning environment. Balancing the need to comply with public health recommendations and offer safe learning environments, many programs have drawn upon virtual technologies to continue delivery of formal academic curricula. Despite widespread use, however, little is currently known as to how trainees have viewed these changes. We sought to explore resident perceptions on the COVID-19 influenced shift from in-person to virtual academic half day (AHD) delivery.

Methods: We created and distributed a cross-sectional survey to 51 pediatric residents who participated in virtual AHD delivery in a university-affiliated program, distributed across three training sites. Survey responses were obtained confidentially through a secure, online platform (REDCap). Descriptive statistics and inductive thematic analysis were used to analyze responses to close-ended and free response questions, respectively.

Results: Response rate was 60.8%. Residents reported statistically significant improvement in their attitudes towards virtual AHD across all metrics collected. Areas most strongly rated included increased trainee engagement and overall satisfaction with virtual delivery, in part due to increased relevance of content. Factors enabling participation included more educationally safe interactions and a more comfortable and flexible learning environment.

Conclusions: Our results suggest that the transition to virtual AHD has generally been well received. At an uncertain time when trainee vulnerability is heightened, the need to explicitly attend to issues of relevance, engagement, safety, and comfort are crucial. Further, given the rapid and reactive pivots to new curricular strategies in the wake of COVID-19, it is incumbent upon programs to incorporate resident feedback to ensure that a learner-centred environment that addresses their educational needs is maintained.

April 17th, 2021 - 15:30 EST
OB1 – 1 Curriculum
OB1-1-1 - 60670

[Development and Implementation of a 2SLGBTQ+ Competent Trauma-Informed Care Intervention across Ontario](#)

Michelle Tam University of Toronto, **Merrick Pilling** University of Windsor, **Lori Ross** University of Toronto

Background/Purpose: 2SLGBTQ+ people are more likely to experience violence and/or trauma than heterosexual or cisgender (i.e., non-trans) people. As many 2SLGBTQ+

people may be in need of support related to experiences of violence and/or trauma, it is important that health and social service providers have the ability to skillfully meet the needs of 2SLGBTQ+ people from a trauma-informed lens. However, research has shown that 2SLGBTQ+ people face barriers in accessing health and social services as a result of lack of 2SLGBTQ+ capacity from service providers or the organizations they work within.

Summary of innovation: The Building Competence, Building Capacity project developed a 2SLGBTQ+ competent trauma-informed care workshop to increase capacity among healthcare and social service providers delivering services to address violence and/or trauma across the province of Ontario. The curriculum was developed with a team of advisory committee members consisting of service providers across Ontario and an Indigenous Elder. Pilot workshops were delivered across Ontario in-person (one full-day) and online (two half-days), and evaluated for feasibility, acceptability, and scalability. Pre-and post-workshop surveys (n=225) were gathered for reaction, confidence, and knowledge. Lastly, interviews were conducted with participants (n=22), facilitators (n=4), and advisory committee members (n=6).

Conclusions: The workshop trained 294 multi-disciplinary service providers working in healthcare, mental health, social service, and anti-violence sectors. We reached 116 institutions, organizations, and services across Ontario. Participants indicated that they would like to see this workshop provided to their organizations, services, and institutions, as well as national expansion to healthcare and social service providers across Canada.

OB1-1-2 - 60849

Community As Teacher: Examining Educational Strategies for Medical Education that Advance Social Accountability

Erin Cameron Northern Ontario School of Medicine, **Hafsa Siddiqui** Northern Ontario School of Medicine, **Ghislaine Pilot-Attema** Northern Ontario School of Medicine

Background/Purpose: Community Engagement (CE), is a critical component to socially accountable medical education. As medical schools strive to be more socially accountably, demonstrated partnerships and collaborations withto communities need to be developed and sustained. Integrating community into medical education ensures that: a) students learn from the community, b) medical schools engage with communities to better understand their health needs, and c) communities become empowered to teach and are part of

preparing future change agents. The aim of this study was to identify best practices around educational strategies that meaningfully engage community.

Methods: A scoping review of published studies on CE in undergraduate and postgraduate medical education in the last twenty years was completed. Mixed methods analysis was preformed on selected articles based on selection criteria.

Results: Findings from the review indicate that most relationships are not described as bi-directional and are primarily focused on school and student outcomes. Definitions of community were found to be heterogeneous and included specific community groups, singular patients, community physicians, and health institutions. Promising practices identify effective strategies for engaging community in curriculum development and where community members are seen as important teachers. Lastly, paternalistic language within CE research suggests unequal power dynamics are still deeply embedded within the field.

Conclusions: Medical schools are increasingly expected to graduate physicians equipped with the knowledge and skills to respond to local health needs. This study identifies the need to continue to advance knowledge around medical education that identifies strategies to meaningfully engage community in order to advance social accountability.

OB1-1-3- 60646

Development and Evaluation of the Online Bridging Program for New International Palliative Medicine Fellows

Ahmed Al-Awamer University of Toronto, **Breffni Hannon** University of Toronto, **Camilla Zimmermann** University of Toronto, **Ebru Kaya** University of Toronto, **Madelaine Amante** University of Toronto, **Hanan Al-Mohawes** University of Toronto

Background/Purpose: International Medical Graduates (IMGs) who train in countries with well-developed palliative care delivery systems are key to advancing palliative care globally. However, these IMGs may encounter unique challenges that compromise their learning experiences. Here we describe the development of the Online Bridging Program in the Division of Palliative Care at the University Health Network Toronto, and discuss its effectiveness in improving IMGs' readiness for Canadian fellowship training.

Methods: The annual Online Bridging Program consists of eight online modules with weekly live sessions.

Summative program evaluation was conducted first through an online survey immediately after completing the Program, and then 6 months into the fellowship, through qualitative one-on-one semi-structured interviews. The interviews were analyzed using Braun and Clarke's model for thematic analysis.

Results: Nine IMGs have participated in the Online Bridging Program from 2018 to 2020. Nine (100%) participated in the survey, and eight (89%) in the interviews. Responses to the online survey were almost unanimously positive, suggesting its effectiveness in assisting the IMGs' transitions into fellowship. Themes that were revealed in the interviews included: the importance of combining online modules and live sessions; easing the fellows' anxiety and facilitating the transition into their new role; improved overall learning and satisfaction because of the Program; and recognizing online format limitations.

Conclusions: The Online Bridging Program effectively eased IMG Palliative Medicine fellows' transition into training and enhanced their learning experience. The Online Bridging Program can be adapted for use by other fellowship specialties.

OB1-1-4 - 60726

Wellness Curriculum Framework for Canadian Medical Education

Rena Far University of Calgary, **Dax Bourcier** Université de Sherbrooke, **Lucas King** University of Saskatchewan, **George Cai** University of Manitoba, **Joanna Mader** Dalhousie University, **Sarah Strong** Memorial – University of Newfoundland, **Madeleine Bond** University of Ottawa, **Emily Yung** McGill, **Inderdeep Mander** University of Alberta, **Raphaelle Koerber** McMaster University, **Maggie Xiao** University of Alberta

Background/Purpose: Rigorous academic expectations and systemic factors within the training environment are linked to significantly higher prevalence of mental illnesses in Canadian medical students relative to the general population. Medical faculties have responded by incorporating wellness content in their programs. Currently, there is no framework available that guides wellness curriculum implementation for medical education in Canada.

Methods: The Wellness Curriculum Task Force, part of the Canadian Federation of Medical Students, adapted the Thomas et al. six-step approach to medical curriculum development to develop an evidence-based Wellness Curriculum Framework (WCF). The needs analysis consisted of a literature review, an environmental scan, and two different targeted surveys to medical students'

associations. Goals and objectives were elaborated followed by recommendations for educational strategies, implementation, and evaluation.

Results: Six of the 15 faculties did not have a formal wellness curriculum, and there was heterogeneity in program content and delivery. The topics of career planning & CaRMS, suicide prevention, and experiential learning had the greatest importance to students. The WCF consists of 16 goals each with 2-5 associated objectives, and is anchored in the five domains of wellness (World Health Organization definition) as well as with the CanMEDS physician health competencies.

Conclusions: The goal of creating the WCF was to support Canadian medical faculties in evaluating their existing wellness programming, or to help guide the development of a new wellness curriculum. The WCF will be a valuable reference to optimize wellness programming to ensure that upcoming physicians are healthy and able to provide the highest quality of care to patients.

OB1 – 2 Health & Wellness

OB1-2-1-60668

A Mindfulness Medical Program in Continuing Education for «Making Humanists Waves» into Physicians' Life by Cultivating Mindful Awareness, Stress Management, Compassion and Health Advocacy

Hugues Cormier Université de Montréal, **Lixin Zhang** Université de Montréal, **Robert Gagnon** Université de Montréal, **Vincent Jobin** Université de Montréal, **Hélène Boisjoly** Université de Montréal

Background/Purpose: Recent studies reported wide-ranging benefits of clinician mindfulness training, namely reduction of burnout, increased empathy, and improvements in patient-centered care. We examined if a brief Mindfulness continual medical education Program - inspired by Oxford Mindfulness professor Mark Williams - enhances capacities such as stress management, Canadian medical competencies (CanMEDS), mindful attention and awareness aptitudes.

Summary of innovation: The program consists of nine hours of mindfulness exercises over three weeks (3h/week.) +home practice. Among the brief exercices: befriending the present moment through body sensations and daily routine exercices at work or at home. Methods: Online questionnaires were used. First, participants were invited to auto-evaluate their pre/post-training (respondents N=68 and 61 respectively) abilities at: i) practicing mindfulness and compassion exercises, ii) cultivating awareness in daily life and medical practice,

and iii) taming challenges like stress management in their everyday or professional life. Second, the 34 most recent participants completed the Mindful Attention Awareness Scale (MAAS) pre/post-training. Third, 53 participants answered 3 pre/post "CanMEDS": health advocacy, compassionate communication, and professionalism. Results: Before participation, 77 %, 63%, and 79% (N=68) answered they were NOT comfortable with the above-mentioned abilities i), ii), and iii) respectively, while they became 93%, 98%, and 93% (N=61) comfortable after. "CanMEDS" assessment (N=53): 74% noted improvements in health advocacy, 40% in compassionate communication, and 25% in professionalism. Compared to pre-training MAAS scores (47.9±11.6), post-training scores (54.8±11.2) significantly improved (N=34, z=3.82, p<0.01.)

Conclusions: Notable benefits were observed for participants-respondents to a Mindfulness Medical Training Program.

OB1-2-2-60541

Changing the Culture: An Introduction to Medical Student Peer Support at the University of Alberta

Inderdeep Mander University of Alberta, **Victor Do** University of Toronto, **Cheryl Goldstein** University of Alberta, **Kendra Raffael** University of Alberta

Background/Purpose: Medical student levels of distress, depression and anxiety exceed that of their non-medical student peers (Moir et al, 2016). Despite this, many avoid seeking professional help, preferring instead to access support from their medical student peers (Chew-Graham et al, 2003). Peer Support has been shown to increase help seeking behaviors, decrease stigma around suicidality and promote social inclusion (Moir et al, 2016).

Summary of innovation: Until recently, the University of Alberta MD Program did not have a Medical Student Peer Support Service. In efforts to promote help seeking behaviour, we designed a student-lead and operated program in which medical students could schedule a one-on-one appointment with a trained peer supporter. We developed a training program adapted from the Canadian Mental Health Association's Edmonton Distress Line and tailored it to medical students providing peer support. Over the inaugural year we have recruited and trained 45 peer supporters from five classes and booked 27 appointments. Common topics discussed include academics (100%), Clerkship concerns (68%), CARMS (56%) and Personal Relationships (50%). All students receive a feedback survey post-appointment to which 41%

(n=11) of students replied. All survey respondents strongly agreed that peer support helped them address their concern(s) and all respondents agreed or strongly agreed they would reach out to peer support again in the future.

Conclusions: The peer support program is well received by medical students providing support and those accessing it. To enhance visibility and address the isolation related to virtual teaching we have launched peer facilitated group support for the incoming class of 2024 and plan to follow data trends related to uptake and repeat appointments.

OB1-2-3-60820

Resilience in the New Millennium - Where Are We and How Are We?

Airiss Chan University of Toronto, **Zi Ying Zhao** University of Toronto, **Alon Coret** University of Ottawa, **Andrew Perrella** McMaster University

Background/Purpose: Resilience is regarded as a holistic approach to preventing burnout, and in recent years, medical education has emphasized the importance of developing strategies for resilience early in training. Whether this cultural shift has achieved its intended impact is yet to be elucidated. The purpose of our narrative review is to examine the range and nature of research activity regarding resilience in undergraduate medical education, and to identify areas for improvement in the current literature.

Methods: MEDLINE and PsycINFO were searched for articles published between January 1, 2000 and July 25, 2019 on the themes of resilience, wellness, or burnout interventions in undergraduate medical education in North America. Two authors independently screened each article, with conflicts resolved via consensus discussion. All included articles then underwent data extraction.

Results: 3323 unique manuscripts were screened, identifying 421 full-text studies for eligibility assessment and 237 articles for data extraction. The majority of articles were published after 2010, especially in the latter half of the decade. 19% of articles were focused on interventions. Several concepts emerged: definitions of resilience and wellness, predisposing and personal protective factors to burnout, institutional changes, as well as curricular interventions designed to augment student resilience or intervene on burnout.

Conclusions: Over the past two decades, medical faculties have come to recognize the importance of fostering and teaching resilience, with increased research interest and sustained student- and faculty-led interventions in this area. Future research should continue to promote

resilience and build wellness through outcome-proven interventions early in medical training.

OB1-2-4-60875

Improving Workplace Mental health: An Evaluation of Managers' Perceived Ability to deal with Workplace Mental Health Issues

Eleftherios Soleas Queen's University, **Nicholas Cofie** Queen's University, **Nancy Dalgarno** Queen's University

Background/Purpose: Unresolved workplace mental health disability issues have the potential to produce deleterious outcomes including employee absenteeism, presenteeism, reduced productivity, increased turnover, and other organizational behaviors, especially in stressful environments such as healthcare. This evaluation study determined the impact of a Morneau Shepell Workplace Mental Health Leadership Certificate (MHLC) training program at Queen's University. We evaluated managers' perceived ability to understand, explain, describe, and express confidence in managing employees with various mental health issues in the workplace.

Methods: Using descriptive and inferential statistical techniques, we analyzed training evaluation scores of five cohorts of participants at pre-training (n =109) and three-months post training sessions (n =73) with a response rate of 67%.

Results: We found statistically significant differences between pre- and post-training evaluation scores. Post-training scores reflected higher increases in participants' perceived ability to manage all the aspects of mental health issues examined (t = -15.39, p < 0.001), particularly with respect to managers' ability to explain why the Declining Behaviour/Performance Model is the best practice approach to addressing an employee's declining mental behaviour in the workplace (t = -16.15, p < 0.05). Also, participation in the training program significantly increased perceived overall ability to manage workplace mental health issues (b = 1.023, p < 0.001) after accounting for effects of demographic factors.

Conclusions: These findings demonstrate the importance of developing and implementing mental health leadership programs for the workplace. The MHLC program can be adapted and implemented in other workplaces to enhance leaders' ability to manage mental health issues.

OB1 – 3 Teaching & Learning - Patient Involvement

OB1-3-1-60492

Community-based Patient Panels as Teaching Tools in Medical Education to build Anti-Oppressive Medical Practice and Advocacy Skills

Helena Kita University of Toronto, **Nikisha Kharé** University of Toronto, **Chantal Phillips** University of Toronto, **Alexandra Florescu** University of Toronto, **Helena Kita** University of Toronto

Background/Purpose: Patient panels-in which patients share their lived experience with illness, injury, and disability-are important tools in pre-clinical medical education that build empathy and understanding of the holistic illness experience. Currently at the University of Toronto, panelists are recruited as volunteers from curriculum leads' own patient pools-a method that has led to panels composed of patients who are primarily White, of high socioeconomic status, and with strong social supports. Thus, students learn to empathize with privileged patients, often undermining empathy for patients without social supports, who cannot adhere to "healthy lifestyles", and who experience discrimination and oppression in healthcare. This perpetuates inequitable healthcare outcomes.

Summary of innovation: A pilot patient panel was conducted using a recruitment approach focused on intentional diversification of patient panels through community-based engagement. A partnership was formed with an organization that houses a speaker's bureau of panelists with lived experience of various forms of marginalization. A grant was obtained to compensate panelists. In a post-panel survey (n = 59), students highlighted that the more diverse panel helped them build empathy towards marginalized patients (93%) and explore approaches to addressing inequity (81%). Students requested this approach play a more consistent role in the curriculum.

Conclusions: Community-based patient panels that are diverse across social differences and illness experiences are important teaching tools to educate medical students about health and structural inequities, build understanding towards marginalized populations, and promote reciprocal approaches to advocacy. This pilot project was used to advocate for permanent implementation of such approaches to all patient panels.

OB1-3-2-59912

Humanism in Surgery - Developing a Patient as Teacher Initiative in Surgical Clerkship

Jory Simpson University of Toronto, **Emilia Kangasjarvi** University of Toronto, **Allia Karim**, **Stella Ng** University of Toronto

Background/Purpose: Patient as Teacher (PAT) programs offer an approach to education that recognizes patient expertise and engages patients in the medical education process. Sharing patient experiences through narratives can create learning and understanding that encourages meaningful dialogue and partnerships between patients and providers. Despite increased adoption in medical education, PAT programs have not been studied sufficiently in the context of surgery.

Summary of innovation: We report findings from the development and evaluation of a newly established PAT program at University of Toronto. Integrated into third year surgery clerkship, the program consists of 3 interactive workshops with 4 different breast cancer survivors and creation of an arts-based reflection. To explore students' experiences, 5 focus groups with 46 students were conducted at rotation's end. Students reflected on overall program experience, including its impact on their educational practices and identity. Transcripts were analyzed using thematic analysis involving an iterative process of inductively coding data and organizing codes into relevant thematic categories. Students valued protected time to learn directly from the patients, slowing down and focusing on the human side of surgical care and from hearing the experiences the "less victorious" narratives. They learnt the significance of the "the little things" in patient-provider interactions, further developed an appreciation for the individuality of experiences despite the same disease and finally the impact of breast cancer on a person's identity and life.

Conclusions: The PAT program successfully promoted and fostered the humanistic side of surgery and is a model that could be incorporated into surgical clerkships throughout Canada.

OB1-3-3-60609

From Skillful to Empathetic: Shifting Medical Students' Perceptions of Surgeons through a Patient as Teacher program

Jory Simpson University of Toronto, **Gurjot Gill**, **Stella Ng** University of Toronto, **Emilia Kangasjarvi** University of Toronto

Background/Purpose: Patient as the teacher (PAT) programs utilise a humanistic approach to medical education. Students attend sessions in which patients share their personal stories and perspectives on how their illness has impacted their lives. Students listen, engage in dialogue, and then use art as a means to reflect on how this has influenced their medical outlook. Evaluating the influence of such initiatives on desired outcomes of interest has proven challenging in the past. Our study uses a novel method to evaluate the effects of the PAT program on humanistic perspectives.

Methods: Students were asked to "list the top 5 attributes of a surgeon, in order of perceived importance" before and after the PAT program. The resulting attributes were coded as either "humanistic" or "non-humanistic" and analysed through an innovative model of qualitative data generation and Bayesian statistical approaches.

Results: After participation in the PAT program students were nearly twice as likely to rank a humanistic characteristic as the most important attribute of a surgeon (OR 1.98, 85% CI 0.80-4.98). After participation in the PAT program, students were also 3.58 times more likely to rank a humanistic characteristic amongst their reported top three attributes for a surgeon (OR 3.58, 89% CI 1.60 - 8.85).

Conclusions: Our innovative statistical model supports the success of this educational PAT program in encouraging a humanistic perspective in surgery and can be used to evaluate the efficacy of new humanistic education initiatives amongst medical education.

OB1-3-4-60520

Clinical teaching at distance: an educational approach of Kazan State Medical University

Elena Koshpaeva Kazan State Medical University, **Laysan Mukharyamova** Kazan State Medical University, **Arina Ziganshina** Kazan State Medical University

Background/Purpose: In the face of the Covid-19 pandemic medical schools worldwide have faced a challenge of delivering clinical training remotely. Fast generation of online teaching and learning recourses is a positive aspect of the current situation. However, the lack of data on the effectiveness of such methods in medical students' training creates the agony of choosing for the educators.

Summary of innovation: On March, 2020 due to the pandemic Kazan State Medical University (KSMU) has transferred to the distance learning. Along with the common methods of remote training, such as video conferences with faculty members, assignments and

MCQs at KSMU educational portal, readings, self-studies and watching recorded lectures, as a part of their curriculum certain groups of students undergoing internal medicine and general surgery rotations were introduced to a platform called CyberPatientTM (CP), which is a University of British Columbia innovative online simulation solution designed for acquisition of applied medical knowledge and experience via virtual environment. Other clinical discipline learners were able to voluntarily access the platform. By the end of the term both groups were surveyed on a subject of satisfaction with the provided online learning opportunities.

Conclusions: According to the results of the survey, CP was rated as intuitive and easy to operate platform. The learners were satisfied with the variety of provided clinical cases. CP was identified as valuable, effective and highly impactful both in terms of the knowledge and experience. So that, the CyberPatientTM platform can be recommended as an effective resource for clinical training.

April 17th, 2021 - 16:30 EST
OB2 – 1 Assessment - Approaches
OB2-1-1-60545

Validation of a Novel Resident Assessment Tool to Support an Anesthesiology Competency-Based Medical Education Curriculum

Alayne Kealey University of Toronto, **Fahad Alam** University of Toronto, **Lisa A Bahrey** University of Toronto, **Clyde T Matava** University of Toronto, **Graham McCreath** University of Toronto, **Catharine M Walsh** University of Toronto

Background/Purpose: Workplace-based assessment (WBA) is key to a competency-based assessment strategy. Concomitantly with our program's launch of Competence by Design, we developed a new formative WBA, the Anesthesia Clinical Encounter Assessment (ACEA), to assess readiness for independence (i.e. entrustability) for competencies essential for perioperative patient care. This study aimed to examine validity evidence of the ACEA during postgraduate anesthesiology training.

Methods: The ACEA comprises an 8-item global rating scale (GRS), an 8-item checklist, an overall independence rating, and case details. ACEA data were extracted for the University of Toronto anesthesia residents from July 2017 to January 2020. Validity evidence was generated from sources based on the unified theory of validity, including internal structure, relations with other variables, and consequences.

Results: We analyzed 8536 assessments for 137 residents completed by 341 assessors. From generalizability analysis, ten observations (2 assessments each from 5 assessors) were sufficient to achieve the reliability threshold of 0.70 for in-training evaluations. A mean GRS score of 3.65/5 provided optimal sensitivity (94%) and specificity (91%) for determining competency on ROC analysis. Test-retest reliability was high (ICC=0.81) for matched assessments within 14 days of each other. Mean GRS scores differed significantly between residents based on their training level (p<0.0001) and correlated highly with overall independence (0.91, p<0.001). The internal consistency of the GRS (α=0.96) was excellent.

Conclusions: This study provides evidence supporting validity of the ACEA for assessing the competence of residents performing perioperative care and supports its use in competency-based anesthesiology training.

OB2-1-3-60651

Assessment beyond the individual: A scoping review on measuring interdependent performance in collaborative environments

Lorelei Lingard Western University, **Stefanie Sebok-Syer** Stanford, **Michael Panza** Western University, **Jennifer Shaw** Western University, **Farah Asghar** University of Toronto, **Mark Syer** Facebook

Background/Purpose: Individual assessment disregards the team context of clinical work. Team assessment dissolves the individual into the group. Neither assessment is sufficient for medical education, where we require measures that attend to the individual trainee while accounting for their interdependence. This study aimed to identify existing approaches to measuring interdependence.

Methods: Following Arksey & O'Malley's methodology, we conducted a scoping review in 2020. A search strategy involving six databases located >11,000 citations. Two reviewers independently screened titles and abstracts, screened full-texts (n=131), and performed data extraction on 26 included articles.

Results: Seventeen of the 26 articles were empirical; 9 conceptual with empirical illustration. Seventeen were quantitative; 9 used mixed methods. The articles spanned 5 disciplines (Education, Psychology, Computer Science, Mathematics, Biology) and various application contexts, from online learning to sports performance. Only two articles were from medical education. Articles conceptualized interdependence of a group, using theoretical constructs such as collaboration synergy and

temporal dependence; of a network, using constructs such as degree centrality; and of a dyad, using constructs such as synchrony and cumulative experience. Both descriptive (e.g., social network analysis) and inferential (e.g., multi-level modelling MLM) measurement techniques were employed.

Conclusions: Efforts to measure interdependence are preliminary and scattered across disciplines. Multiple theoretical concepts and inconsistent terminology may be limiting programmatic work. However, the literature reveals the potential of measurement techniques such as MLM and efforts that combine multiple measures. With only two studies in medical education, application and adaptation of existing approaches to the clinical training context requires further study.

OB2-1-4-60904

Assessing Professionalism: what works and what does not

Keith Wilson Dalhousie University, **Wendy Stewart** Dalhousie University

Background/Purpose: Numerous instruments exist to assess professionalism in undergraduate medical schools. These include self-administered rating scales, direct observation, multi-source feedback (including peer assessment), patient opinion, and simulation. Challenges in using these tools include feasibility and alignment with overarching objectives of the respective institutions. We underwent an exploration of different methods and set out to improve our assessment of professionalism at the undergraduate level.

Summary of innovation: A Professionalism Working Group was created, tasked with exploring options to improve our ability to define and assess professionalism qualities that we expect of our graduates. Pilots were conducted using peer and self assessment as potential models in pre-clerkship. Peer feedback was anonymized and given to learners by their tutors. Additionally, guided self-reflection was used to help learners assimilate their own observations with those of their peers and tutors. In clerkship, changes to the assessment of professionalism and its position and priority on our In-Training Evaluation Reports (ITERs) were made. It was found that peer assessment during our longitudinal Professional Competencies course aligned with observations of professionalism by our tutorial faculty. At the clerkship level, making the assessment of professionalism a priority by placing it at the forefront of all clerkship ITERs, addressed some previously unmasked hidden curriculum

issues of professionalism being a secondary or tertiary goal. Following the changes, there was a significant increase in the amount of actionable assessment targets.

Conclusions: Prioritizing professionalism assessment at the undergraduate level leads to improved quality of assessment narratives. Corrective action, if necessary, can thus be implemented at a much earlier stage in a very transparent way. Approaches to assessment of professionalism need to be multifaceted and in keeping with programmatic assessment principles. Garnering the input of numerous stakeholders and willingness to pilot assessment initiatives can enhance existing assessment modalities.

OB2 – 2 Curriculum

OB2-2-1-60688

Curriculum Renewal as Organizational Learning

Christen Rachul University of Manitoba, **Benjamin Collins** University of Manitoba, **Helen Mawdsley** University of Manitoba, **Keevin Bernstein** University of Manitoba, **Ira Ripstein** University of Manitoba, **Joanne Hamilton** University of Manitoba

Background/Purpose: In 2015, the UGME program at the University of Manitoba began implementing a renewed curriculum after a process that began in 2010. To identify factors that facilitate and impede the goals of curriculum renewal, we relied on Crossan's 4Is model of organizational learning that links individuals, groups, and the organization through the four processes of intuiting, interpreting, integrating, and institutionalizing.

Methods: As part of a mixed-methods evaluation of the new curriculum, we conducted 16 semi-structured interviews with leadership, faculty members, and administrators who played key roles in the curriculum renewal process. We conducted a thematic analysis of interviews informed by Crossan's 4Is model of organizational learning.

Results: Analysis of interviews revealed that while many of the goals for the renewed curriculum have been achieved, some outstanding issues remain. Also, curriculum renewal is not a bounded event, but an ongoing process of organizational learning. The themes of Collaboration, Engagement, Leadership, Decision-making Practices, and Processes and Structures provide insight into the factors that facilitated and impeded the renewal process.

Conclusions: Some of the goals of curriculum renewal have been achieved through strong leadership, frequent collaboration, and engagement from multiple

stakeholders that facilitated the development of shared understandings through which new routines and processes formed. Curriculum renewal was impeded by inconsistent decision-making processes and evolving processes and structures in terms of sufficient labour force, recognition, and protected time. Findings provide insight into ways that outstanding issues can be addressed and that the on-going process of curriculum renewal can be supported through individual and collective actions.

OB2-2-2-60619

Problem-Based Learning: Future of Genetic Education

Bipandeep Abbat McMaster University, **Jennifer Mackenzie** McMaster University

Background/Purpose: The incorporation of genetics into medical practice has the potential to improve patient health outcomes but is often overlooked. Problem-based learning (PBL) is a well-established pedagogy in medical education but there is little literature exploring PBL to improve genetics literacy. The medical school at McMaster University, which uses PBL as the primary pre-clerkship pedagogy, launched a renewed spiral curriculum in 2019 involving revision of the PBL scenarios. Feedback is provided throughout with no formal examinations. Our goal was to explicitly integrate genetics into PBL cases and determine if objectives were met.

Summary of innovation: PBL scenarios were reviewed for opportunities to integrate the Canadian genetics (2019 consensus), and McMaster specific objectives. Initially, objectives were mapped to each case. Subsequently, a medical student (BA), through lived experience and informal peer feedback assessed the extent to which, if at all, genetics concepts were explored and scaffolded during PBL. Genetics was also blueprinted into formative assessments to successfully include concepts from the curriculum. Recommendations were made to address gaps in content and organization of the spiral curriculum.

Conclusions: Although the objectives were covered, repetition of basic concepts and less attention to more complex objectives was observed as the cases progressed. Challenges included finding opportunities to include genetics in common patient scenarios and variation between PBL groups. The PBL process inherently includes self-directed learning and application of genetics in common clinical contexts, thus improving gaps in translation of genetics into daily practice. Therefore, these students are well-positioned to adapt to the rapidly changing role of genetics in healthcare.

OB2-2-3-60821

The impact of undergraduate conferences on medical student engagement in Ophthalmology and surgery.

Loay Rahman The Hillingdon Hospital NHS Foundation Trust, **Daniel CS Wheeler** St. George's Hospital NHS Foundation Trust, **Roxanne Lee** Southend University Hospital NHS Foundation Trust, **Filippos Papadopoulos** King's College London

Background/Purpose: Given the highly competitive nature of Ophthalmology and the decreasing emphasis on surgical teaching at undergraduate level, early exposure is an important factor in developing interest and awareness for Ophthalmology and its application process. Thus, we organised an Ophthalmology conference for UK undergraduate medical students as a curriculum adjunct, whilst aiming to ascertain pre- and post-conference perceptions towards a career in Ophthalmology.

Methods: Collaborating with Moorfields Eye Hospital, we delivered a national conference incorporating keynote lectures into the Ophthalmology subspecialties, panel discussions, and practical workshops including microsurgical skills and portfolio and interview techniques. Pre- and post-conference questionnaires were distributed to the 56 attendees, assessing key metrics encompassing awareness of Ophthalmology and surgery as a career and confidence in performing relevant practical skills.

Results: Pre- and post-conference 5-point Likert responses demonstrated statistically significant increases across metrics including understanding of Ophthalmology Speciality Training application (2.80 ± 1.13 to 4.37 ± 0.63 ($p<0.001$)), understanding of Ophthalmology as a career (3.27 ± 0.93 to 4.41 ± 0.62 ($p<0.001$)) and confidence performing basic microsurgical techniques from 1.71 ± 1.14 to 3.51 ± 0.62 ($p<0.001$). Thematic analysis of qualitative responses revealed lifestyle or work-life balance as the biggest attracting factor to the speciality (pre-conference 22.2% of respondents, post-conference 29.3%), whereas competition rate as the major deterring factor (31.8% pre-conference vs 35.6% post-conference). Lectures were rated at 4.26 ± 0.53, workshops 4.35 ± 0.17, and an overall conference rating of 4.55 ± 1.13, with 98% of attendees indicating they would recommend this to colleagues.

Conclusions: We demonstrate the profound value of this conference on improving awareness of Ophthalmology from an early career stage. We propose that extrapolating this undergraduate curriculum adjunct will stimulate similar impactful engagement across other surgical specialities.

OB2-2-4-60807

Using a Rapid-Cycle Approach to Evaluate Implementation of Competency-Based Medical Education

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Background/Purpose: Queen's University implemented competency-based medical education (CBME) across all 29 programs on July 1, 2017. The purpose of this study is to describe key stakeholders lived experiences in CBME Foundation of Discipline stage in the Ophthalmology department.

Methods: Using a case study approach, a mixed method rapid-cycle evaluation was conducted during the 2018-2019 academic year. The evaluation consisted of two evaluation cycles with the first round of interviews and focus groups occurring in October 2018 and in March 2019. Residents, faculty, academic advisors, competence committee members, program director, program administrator, and the educational consultant were interviewed. Recommendations were implemented in January 2019 and June 2019.

Results: Stakeholders identified the need to build a shared understanding about how to both trigger assessments and encourage all faculty members to engage in the process. Stakeholders also described how their roles continued to evolve following CBME implementation. Participants discussed how the department functioned and would continue to build understanding about the assessment process. The rapid-cycle evaluation identified the need for streamlining and clarifying specific Entrustable Professional Activities. Stakeholders did suggest a preference for narrative feedback and identified the benefits of the feedback provided.

Conclusions: Rapid-cycle evaluation has been a valuable process for identifying key strengths and recommendations following implementation of a new CBME curriculum. Exploring lived experiences resulted in positive and immediate improvements to the residency program. Both the recommendations and evaluative approach will benefit other departments and institutions as they implement CBME.

OB2 – 3 Teaching & Learning

OB2-3-2-59952

Image Interpretation: Evidence Informed Learning Opportunities

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Background/Purpose: Learning analytics is the measurement, collection, analysis and reporting of data for the purposes of understanding and optimizing learning. We derived learning analytics on a challenging radiograph to determine variables that predict for an incorrect diagnostic interpretation. Furthermore, we determined image review processes inherent to novice versus experienced participants that were associated with a higher diagnostic performance.

Methods: Physician participants attempted to detect pneumonia on 200 pediatric chest radiograph (pCXR) on a digital platform. We examined associations with diagnostic success with respect to physician demographics and pCXR variables.

Results: We enrolled 83 participants (20 medical students, 40 postgraduate trainees and 23 faculty), obtaining 12,178 case interpretations. Variables that predicted for pCXR interpretation difficulty were pneumonia present vs. absent (β = 8.7; 95% CI 7.4, 10.0); low vs. high visibility of pneumonia (β = -2.2; -2.7, -1.7); non-specific lung pathology present vs. absent (β = 0.9; 0.4, 1.5); and, localized vs. multifocal pneumonia (β = -0.5; -0.8, -0.1). Novices reviewed both available radiograph views less often than faculty and were more accurate when they reviewed both views ($p<0.0001$). Novices also spent less time reviewing images, despite lower accuracy scores ($p<0.0001$). Physician certainty was associated with an increased probability of case correctness, and this effect was more prominent in faculty ($p<0.0001$).

Conclusions: Learning analytic information can be used to allow for a customized weighting of which cases to practice and predict participant review processes that may lead to diagnostic error.

OB2-3-3-60530

The impact of teaching for critical reflection: A Bayesian analysis

Stella Ng University of Toronto, **Nicole Woods** University of Toronto, **Jeff Crukley** independent, **Victoria Boyd** University of Toronto, **Ryan Brydges** University of Toronto, **Emilia Kangasjarvi** University of Toronto, **Mahan Kulasegaram** University of Toronto, **Adam Gavarkovs** University of Toronto

Background/Purpose: While critical reflection supports effective practice within socially challenging situations (e.g. effectively advocating for equitable access), most professionals develop these capabilities by happenstance. Teaching for critical reflection has shown some promise in helping health professionals navigate these challenges. We aimed to examine this potential and asked: does teaching critical reflection influence what learners talk about (i.e., the content of their talk) and how they talk (i.e., whether they talk in critically reflective ways) during a subsequent learning session and debrief?

Methods: We randomized pre-clinical students (n = 75) into control and intervention conditions (8 groups each of up to 5 students). Participants completed a Social Determinants of Health (SDoH) module, followed by a SDoH discussion (control) or critically reflective dialogue (intervention). Afterwards all experienced a common learning session (homecare curriculum and debrief) as outcome assessment. Blinded coders coded transcripts for what was said (using a codebook) and how (critically reflective or not). We constructed Bayesian regression models to determine the probability of what codes and how codes in each meaningful segment of "talk."

Results: Groups exposed to the intervention condition were more likely, in a subsequent learning experience, to talk in a critically reflective manner (0.096 [0.04, 0.15]) but we found no meaningful differences in what was said.

Conclusions: This study empirically demonstrated theoretical assertions that teaching critical reflection can impact learners' subsequent ways of approaching practice, toward more critically reflective views. By definition, critical reflection attends to equity and compassion. Both the results and methods of this study raise important research and education considerations.

OB2-3-4-60718

Exploring the intraoperative teaching approaches of influental surgeons

Aaron Grant Western University, **Jecqueline Torti** Western University, **Mark Goldszmidt** Western University

Background/Purpose: There is wide variability in how academic surgeons manage their role as intraoperative educators. This study sought to explore the practices of surgeons deemed influential by their residents, allowing insight into a variety of potentially effective practices.

Methods: Constructivist grounded theory was used to guide data collection and analysis. Data sources included (1) electronic surveys from senior surgical residents/recent graduates from an academic hospital in Canada, (2) intraoperative observations of teaching interactions followed by (3) semi-structured interviews with observed surgeons.

Results: We developed a framework which groups effective teaching into three overlapping approaches: exacting, empowering, and fostering. The approaches differed based on the level of independence granted and the degree of expectation placed on individual residents. Each demonstrates a different way of balancing the multiple supervisory roles. We also identified strategies that could be used across approaches to enhance learning.

Conclusions: For surgical educators seeking to improve on the quality of intraoperative supervision they provide, frameworks such as this may be demonstrative of what effective supervision may look like. Knowledge of proven strategies combined with reflection on how surgeons teach, and on how they balance responsibilities to patients and trainees may allow them to broaden their educational practice.

April 18th, 2021 - 10:00 EST
OC1–1 Teaching & Learning - Accountability

OC1-1-1-60850

Power to the people? A critical review of co-produced mental health professions education

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Background/Purpse: By involving service users in health professions education - often referred to as coproduction, educators aspire to produce transformational change by centring the human, social and ethical dimensions of care through shifts in power between service providers and users. However, the literature on whether and how co-production achieves these ambitious goals remains under-developed. This gap is particularly pressing in mental health education, where power differences between service providers and service users are heightened. This critical literature review aimed to understand how power is addressed in co-produced mental health professional education.

Methods: Our team of service user educators, health professionals and education researchers conducted systematic searches in multiple databases not limited by study design, publication type or year. We screened 6162 titles and abstracts. Articles focusing on co-production in mental health professions education were included for full-text review. Of the 303 articles, 171 were selected and iteratively analyzed.

Results: Power figures prominently in this literature, but it is rarely made visible. Few articles explicitly use a theory of power to understand changing relations of service providers and users; the democratic and emancipatory values that underpin co-produced education are rarely reflected in the epistemology or methodology of studies about it; authors infrequently engage in reflexivity; and the larger social structures that shape and constrain co-produced education are rarely considered.

Conclusions: Our review highlights a crucial contradiction in this literature: while the potential benefits for shifting power are recognized, authors often fail to seriously contend with the complexities of power relations. This lack of critical analysis threatens the goals of co-production, paradoxically serving to reinforce existing power relations and structures in health professions education and beyond.

OC1-1-2-60700

Actions speak louder than words: A critical discourse analysis of anti-racism statements released by medical schools and organizations

Allison Brown University of Calgary, **Favour Omobhude** University of British Columbia, **Emmanuelle Auguste** University of Ottawa, **Naomie Bakana** University of Lethbridge, **Javeed Sukhera** Western University, **Allison Brown** University of Calgary

Background/Purpose: In the context of increasing attention to anti-racism in medical education, several organizations responded to the murder of George Floyd with public statements. Although this response is encouraging, a deeper exploration of anti-racist discourse may improve our understanding on how to address anti-racism in a meaningful and sustainable way. This aim of this study was to critically examine this discourse.

Methods: A three-dimensional model for critical discourse analysis (Fairclough, 2013) was used to examine 45 statements released by medical schools and organizations in Canada in the United States.

Results: Discourse varied across geographic and organizational contexts. While some statements included an explicit focus on anti-Black racism and racial injustices in society, healthcare, and medical education, conflicting messages were prevalent across the statements. Statements often centred previous efforts within the institution rather than outlining future action to promote racial justice at an institutional level. While racism was described as systemic, statements commonly articulated recommendations at an individual level (e.g., self-education). Only three statements stated the phrase "Black Lives Matter". Statements acknowledged the trauma and grief experienced by racialized members at their institution without offering resources or supports to them. A common message was "we're listening and learning" - yet no mechanisms provided for individuals to be heard.

Conclusions: Despite any well intentions, the vast majority public statements released by medical schools and organizations lacked critical introspection and actionable steps towards anti-racism. Findings suggest the need for concern about the potentially performative nature of academic medicine's efforts to promote racial justice.

OC1-1-3-60559

Exploring how providing care for stigmatized patients influences the moral development of medical learners

Mark Goldszmidt Western University, **Sara Calvert** Northern Ontario School of Medicine, **Sarah Burm** Dalhousie University, **Sayra Cristancho** Western University, **Jacqueline Torti** Western University, **Javeed Sukhera** Western University, **Lisa Liu** Western University

Background/Purpose: In acute hospital settings, medical trainees provide care for many stigmatized patient populations such as patients who inject drugs (PWID) and are often confronted with ethical dilemmas inherent to their care. Although providing care to these populations likely contributes to trainee's moral development, little research has explored its impact. As part of a larger study exploring the inpatient care of PWID patients, we identified how social and material forces may be playing a role in shaping trainee moral development.

Methods: We conducted a qualitative study informed by sociomaterial theories. Data consisted of observational field notes from 48 medical learners, 8 interviews and medical documentations from inpatient units of two urban hospitals in Ontario, Canada. Constant comparative coding and analysis were conducted consistent with constructivist grounded theory methodology.

Results: In contrast to other patient populations, caring for PWID patients appeared to frequently trigger a sense of frustration in learners. In certain learners, this frustration is observed to further perpetuated a sense of indifference and avoidance behaviour. Numerous social and material entities appeared to play a role in shaping this outcome, including: the cyclic nature of treatment, perceptions of stigma, difficulty establishing patient rapport, variability in supervisory practices of senior residents and attending physicians, and material influences such as hospital policy and physical environment.

Conclusions: Existing practices may hinder the moral development of medical trainees involved in the care of stigmatized populations such as PWID. Recognizing and addressing the moral experiences within clinical training provides an opportunity to improve equity and address health disparities.

OC1-1-4-60924

Integrating anti-racism and structural violence education into pre-clerkship psychiatry curricula

Kavya Anchuri University of Calgary, **Taelina Andreychuk** University of Calgary, **Natalie Jacox** University of Calgary, **Allison Brown** University of Calgary

Background/Purpose: The recent global resurgence of the Black Lives Matter movement has manifested within Canadian medical schools as anti-racist commitments, manifestos, curriculum changes, and calls to action. BIPOC (Black, Indigenous and, People of Colour) students are asking medical schools to confront racism within Canada's healthcare institutions and improve the quality of care that marginalized patients receive. Racism in Canada can take the form of structural violence, which can include police brutality, medical violence, systematic neglect, and intergenerational trauma. Among other pathologies, these phenomena can yield the mental health effects of chronic stress, anxiety, and collective/ community PTSD.

Summary of innovation: We designed and evaluated a mandatory teaching session delivered to 153 second-year medical students about the disproportionate impacts of structural violence on the mental health of marginalized communities-specifically Black, Indigenous, 2SLGBTQIA+, and PWUD (People Who Use Drugs) communities. This session was taught during the 3-week pre-clerkship psychiatry course in August 2020. We leveraged Zoom and the transition to online learning necessitated by COVID-19 to assemble an interdisciplinary panel of experts from around Canada with collective expertise in psychiatry, clinical psychology, anti-racism, police violence, and Indigenous health. The panel format was supplemented by 'breakout rooms' of approximately 10 students to facilitate more intimate discussions.

Conclusions: Findings from our repeated measures study and program evaluation highlight numerous pedagogical and professional benefits of this session for medical students, suggesting the urgency for longitudinal integration of training on anti-racism and structural violence throughout pre-clerkship curricula around the country, beyond the psychiatry block alone.

OC1 – 2 Admissions General

OC1-2-1-60808

Rural and Remote Sustainability Score. Eight years of experience as a screening tool for admission to a distributed medical education program (DME) with an emphasis on rural practice.

Tammy Klassen-Ross University of Northern British Columbia, **Paul Winwood** University of British Columbia, **Geoff Payne** University of Northern British Columbia

Background/Purpose: The University of British Columbia (UBC) is addressing the shortage of physicians in remote and rural communities in BC through a distributed model of undergraduate medical education (DME). For its Northern Medical Program (NMP), whose goal is to train physicians for northern and rural communities, a novel admissions tool, the Rural and Remote Suitability Score (RRSS) was developed. The RRSS was designed to provide an objective measure of undergraduate medical applicants' affinity for training in rural, remote, and/or northern settings and those most likely to practice family medicine in such communities.

Methods: The RRSS is a self-report screening tool that is used as part of the admissions process to the NMP. The RRSS assesses students in four categories 1) Rural lived experiences, 2) Self-Reliance and Independence, 3) Rural related activities, and 4) other information including ties to rural areas and rural mentors. An adjusted total score RRSS is generated combining all categories. Practice locations were scored on a 6-point scale based on the BC Rural Subsidiary Agreement designation and population size. Practice locations were obtained from the College of Physicians of BC, the Canadian Medical Directory and alumni data.

Results: Preliminary analyses of RRSS scores of graduating classes from 2008-2016 (n=245) indicated a significant positive correlation between RRSS adjusted total score and recruitment location r = 0.16, p < .05. Furthermore, it was found that 59% of the students who chose NMP as their first-choice ranking of the 4 DME sites of UBC pursued a career in Family Medicine.

Conclusions: There is a positive relationship between the RRSS score and rural practice location. This supports the use of the RRSS as an admissions tool for rural DME. The results also demonstrate that students are more likely to pursue family medicine if they attend the Northern Medical Program, which was one of the purviews of the distributed site.

OC1-2-2-60845

The impact of a medical school admissions pathway on social accountability and rural physician recruitment

Kristi Thompson Western University, **Tisha Joy** Western University, **Saad Chahine** Queen's University, **Don Cartwright** Western University

Background/Purpose: To improve local and rural physician recruitment, the Schulich School of Medicine and Dentistry introduced, in 2005, a Southwestern Ontario Medical Education Network (SWOMEN) pathway for medical school admissions to attract high school graduates within the ten predominantly rural counties in the catchment region. This study assesses the impact of the SWOMEN admissions pathway on the percentage of medical school graduates practising in a rural setting in the SWOMEN region and across Canada.

Methods: Either high school or home postal code of student applicants admitted to Schulich Medicine from 2002 to 2010 were tracked to practice location postal code as of 2020, extracted from Scott's Medical Directory. SWOMEN and rural classifications at time of application and at practice were substantiated by Canada Post postal code data. Chi-Squared analyses were performed.

Results: Of the 1,000 (77%) Schulich Medicine graduates tracked to a Canadian practice location, 44.9% vs. 14.0% (p<0.001) of those from SWOMEN vs. non-SWOMEN regions, respectively, were practising within the SWOMEN region as of 2020. The implementation of the SWOMEN pathway resulted in a near-doubling of graduates practising within the SWOMEN region by 2020 (28.1% vs. 15.4%, p<0.001). Most notably, the introduction of the SWOMEN pathway significantly increased graduates practicing in rural locations within the SWOMEN region (7.2% post-pathway vs. 3.3% pre-pathway, p=0.008) as well as across Canada (15.7% vs.11. 2%, p=0.04).

Conclusions: The introduction of the SWOMEN pathway helped achieve social accountability by increasing local physician recruitment within SWOMEN and rural physician recruitment within SWOMEN and across Canada.

OC1-2-3-60910

Gender and age effect in integrated French Multiple Mini Interviews. A maturity issue?

Jean-Michel Leduc Université de Montréal

Background/Purpose: Since the implementation of MMI in three French-speaking medical schools in Québec in 2009, higher scores are obtained by female candidates. Analysis of scores by gender and by age shows interesting

patterns. The objective of this study was to study the effect of gender, age and their interaction in MMI scores.

Methods: Scores on MMI from 2009 to 2019 were assembled and standardized on a common scale with a mean of 500 and a standard deviation of 50. Anova on mean scores and graphical presentations were used for analysis.

Results: Results were obtained for 14,615 candidates and mean age was 21.5 (sd =3.7). Mean score for women (n= 8,837) was 505.2 (sd = 47.4) and 492.7 (sd = 51.4) for men (n= 5,778). ANOVA showed a significant effect of gender (F=7.536; p=0.006) and age (F=12.969, p<0.001) and no interaction between gender and age. While male have lower scores at all age groups, a clear parallel progression of scores by age for both gender groups is seen until the age of 25-26y, with a significant drop of scores for both groups after 27y.

Conclusions: MMI scores are significantly associated with gender and age. A non-linear U-shape progression of MMI scores is associated with age. While the delayed progression of MMI scores in male applicants could be explained by a possible lag in maturity, drop of performance for both groups after 27y is more challenging to interpret. Some implications of those effects on students cohorts will be discussed.

OC1-2-4-60702

Adapting the Admissions Interview During COVID-19: A comparison of in-person and video-based interviews' validity evidence

Kulamakan Kulasegaram University of Toronto, **Victorina Baxan** University of Toronto, **Elicia Giannone** University of Toronto, **David Latter** University of Toronto, **Mark Hanson** University of Toronto

Background/Purpose: COVID-19 physical distancing limited many schools' ability to conduct in-person interviews for the 2020 admissions cycle. The University of Toronto was already in the midst of its interview process with two-thirds of the applicants having completed the in-person modified personal interview (MPI). As the university and surrounding region was shutdown, we shifted in the middle of the application cycle to a semi-synchronous video-based interview approach (vMPI). We describe the development, deployment, and evaluation of the two approaches in the midst of the admissions cycle.

Summary of innovation: Existing resources and tools were used to create a bespoke interview process with the assistance of applicants. The vMPI was similar in content

and process to the MPI: a four station interview with each station mapped to attributes relevant to medical school success. Instead of live interviews, applicants recorded 5-minute responses to questions for each station using their own webcams or other hardware. These responses were later assessed by raters asynchronously. A total of 232 applicants completed the vMPI out of a total of 627. We compare the validity evidence for the vMPI to the MPI on the internal structure, relationship to other variables, and consequential validity including applicant and interviewer acceptability. Evaluation Outcomes: The vMPI demonstrated similar reliability and factor structure to the MPI. Like the MPI, it was predicted by non-academic screening tools but not academic measures. Applicants' acceptability of the vMPI was positive. The vast majority of interviewers also found the vMPI to be acceptable and demonstrated confidence in their ratings.

Conclusions: Continuing physical distancing concerns will require multiple options for the admissions committee to select medical students. The vMPI is an example of a bespoke approach that schools can implement and may have advantages for selection beyond the COVID-19 pandemic. Future evaluation will examine additional validity evidence for the tool.

OC1 – 3 Research Methods
OC1-3-1-60856

What influence do systematic reviews in medical education really have? A bibliometric perspective

Tanya Horsley The Royal College of Physicians and Surgeons, **Yvonne Steinert** McGill, **Karen Leslie** Queen's University, **Anna Oswald** University of Alberta, **Farah Friesen** Women's College Hospital, **Rachel Ellaway** University of Calgary

Introduction: Knowledge syntheses in medical education are intended to promote the translation to, and mobilization of, research knowledge into practice. Despite the effort invested in conducting them, how these knowledge syntheses are used is unclear. This study aimed to explore how knowledge syntheses published by the Best Evidence Medical Education Collaboration (BEME) have been used in a cross-section of published literature.

Methods: Using bibliometric techniques, citation patterns for BEME reviews were explored using data drawn from Web of Science and Scopus, and a sub-sample of citing papers.

Results: Bibliometric data on 3419 papers citing 29 BEME reviews were analysed. More detailed data were extracted from a random sample of 629 full-text papers.

BEME reviews were most often positioned to consolidate and summarize the current state of knowledge on a particular topic and to identify gaps in the literature; they were also used to justify current research, and less frequently to contextualize and explain results, or direct future areas of research. Their use to identify instruments or methodological approaches was relatively absent.

Conclusions: While BEME reviews are primarily used to justify and support other studies, the current literature does not demonstrate their translation to educational practice.

OC1-3-2-60235

Global Perceptions on Social Accountability and Outcomes: A Survey of Medical Schools

Cassandra Barber Maastricht University, **Saad Chahine** Queen's University, **Jimmie Leppink** University of York

Background/Purpose: Social accountability is central to medical education, yet despite repeated international calls for stronger evidence of institutional effectiveness, programs continue to struggle to demonstrate social accountability. This study explores institutional practices and administrative perceptions of social accountability in medical schools, globally.

Methods: An online survey was emailed to a purposeful sample of academic deans and program directors/leads of English-speaking medical schools that offer an undergraduate medical program from 245 institutions in 14 countries. Survey items were developed using previous literature and categorized using context-input-process-products (CIPP) evaluation model as an organizational framework. Exploratory Factor Analysis (EFA) was used to assess the inter-relationships among items. Reliability and internal consistency of items were evaluated using McDonald's omega. Analysis of variance (ANOVA) and post hoc analyses were used to examine institutional differences.

Results: Findings from 103 deans and program directors/leads collected between February-June 2020 are presented. Common perceptions and institutional practices of social accountability were identified. Five-factors were extracted, accounting for 68% of the variance: community partnerships; institutional mandates; selection/recruitment; institutional activities; and community responsibility. Institutional nuances and differences among factor subscales were observed.

Conclusions: This study identified institutional practices and administrative perceptions of social accountability.

While, most medical schools expressed an institutional commitment to social accountability, the effects of their outcomes on the community remain unknown and not evaluated. Institutional practices of social accountability focus on inputs and processes and lack product outcomes. Overall, this paper offers programs and educators a psychometrically supported tool to aid in the operationalization and reliability of evaluating social accountability.

OC1-3-3-60491

How medical students make meaning of early significant clinical experiences: The role of social networks

Samantha Stasiuk University of British Columbia, **Laura Nimmon** University of British Columbia, **Maria Hubinette** University of British Columbia

Background/Purpose: Medical curricula are increasingly providing opportunities to promote, support and guide reflection for medical students. However, we do not fully understand the broader social influences that shape reflection. This understanding is critical to frame our teaching language and enhance authentic meaning making in early years medical students. This study asks the question: How do students use social networks to reflect on early significant clinical experiences, and what meaning do students find in these interactions?

Methods: This study employed a qualitative social network analysis approach. Our study was conducted with seven first year undergraduate medical students. Data consisted of participant generated sociograms and in-depth individual semi-structured interviews.

Results: Learners described the importance of verbal processing within their social networks and engaging in dialogue around early significant clinical encounters. Learners also struggled to find meaningful ways to involve their networks outside of medicine in their new experiences. Learners found some curricular opportunities such as reflective portfolio sessions to be useful.

Conclusions: Our study is one of the first to characterize the social networks inside and outside of medicine that medical students utilize in order to make meaning of early significant clinical experiences. We were able to capture the role students' social networks play in the support of their developing professional identity. This study is a first step in helping students to identify their own social networks, and an explicit acknowledgment of important identity intersections both inside and outside of medical

school, through a vivid representation of the composition of network ties. The insights add to a growing body of literature demonstrating the importance of relationship-centered education for reflection.

OC1-3-4-60583

Peer Mentorship to RE-ignite the SEARCH in Students for Research

Huma Ali Aga Khan University Medical College, Pakistan, **Russell Martins** Aga Khan University Medical College, Pakistan, **Sadia Fatima** Aga Khan University Medical College, Pakistan

Background/Purpose: Research is an integral part of medical education across the globe. However, the research output from medical students often leaves a lot to be desired. This can be attributed to inadequate research training, and lack of mentors and opportunities. Thus, our innovative approach of introducing peer mentorship in research aims to increase not only the self-proficiency of students but also the quality and quantity of research.

Summary of innovation: A predefined criterion was used to select 16 penultimate and final year medical students to serve as Student Mentors (SMs). They designed innovative pedagogies, conducted a series of research workshops (RWs) for 187 participants in January 2020 at the Aga Khan University, Pakistan, and mentored them for 6 months. Data was collected through three questionnaires; pre- and post-RWs self-proficiency ratings (lowest: 1- highest: 10), a feedback form, and a 6-month follow-up survey.

Conclusions: With a response rate of 92%, a significant improvement was seen in overall self-proficiency post-RWs (p < 0.001), with the highest increase in 'Avoiding Plagiarism and Using Referencing' (4.78 ± 2.31). A 6-month follow-up survey evidenced an increase in student involvement in research by 29.2% (p < 0.001). 18 (20.5%) students published their work in peer-reviewed journals (mean impact factor =1.393) versus only 3 (3.4%) pre-RWs (p < 0.001). These results establish the effectiveness of peer-learning and student mentorship in improving the research output. Additionally, the teaching pedagogies implemented in the RWs can be used as a solid framework for adaptation within conventional undergraduate medical education.

April 18th, 2021 - 11:00 EST
OC2 – 1 CPD

OC2-1-1-60630

A Qualitative Study to Understand the Cultural Factors that Influence Clinical Data Use For Continuing Professional Development

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Background/Purpose: The use of data to inform lifelong learning (LLL) has become an increasingly important dimension of clinical practice. Physicians could leverage data to develop adaptive expertise in identifying practice needs, developing learning plans, and evaluating practice adjustments. Despite these benefits, there is variable evidence in physicians engaging in data-informed learning activities, particularly for continuing professional development (CPD). The purpose of this study is to explore cultural factors (individual, organizational, and systemic) that influence the use of clinical data to inform LLL and self-initiated CPD activities.

Methods: This qualitative study is part of an explanatory sequential mixed-methods study examining data-informed learning. Participants were psychiatrists and general surgeons from Canada and the United States. Recruitment occurred between April-November 2019 and the authors conducted telephone semi-structured interviews between May- November 2019. Content analysis was performed using an iterative, inductive method of constant comparative analysis.

Results: Three major themes emerged: (1) data quality and the trustworthiness of the data, (2) the importance of a team-based approach to data, including collaboration with data specialists within clinical departments and leadership support, and (3) the need for a systematic approach to the use of the data, including organizational support for data literacy skill development, infrastructure and investments.

Conclusions: Building trust, taking a team-based approach, and engaging multiple stakeholders throughout the data lifecycle, particularly data specialists and organizational leadership, may significantly improve physicians' use of data for learning.

OC2-1-2-60341

Exploring learning needs and preferences among early career physicians

Anne Mahalik Dalhousie University, **Tanya MacLeod** Dalhousie University, **Connie LeBlanc** Dalhousie University, **Lisa Bonang** Dalhousie University

Background/Purpose: It is reasonable to expect that early career physicians have unique continuing professional development (CPD) learning needs and preferences, however, there is little research available on this topic. The purpose of this study was to explore the learning needs and preferences of early career physicians (≤10 years in practice) to inform CPD program planning.

Methods: An online survey and individual interviews were conducted with early career physicians in Nova Scotia. Survey data were collected from 51 participants; of these, 11 participated in personal interviews. Descriptive statistics and thematic analysis were used to analyse the data.

Results: Participants identified the need for education in practice management (e.g., billing, medicolegal concerns, time management); navigating the local healthcare system (e.g., referral practices and requirements); skills-based knowledge (e.g., changes in practice, maintaining clinical competency); and career development (e.g., opportunities for mentorship, research, teaching, academic career progression and leadership). Participants also described various factors that influence their participation in CPD. Examples included their preferred learning method, relevance of the topic to their practice, location, reputation of the speaker, and the cost of the event, both in money and time.

Conclusions: In this presentation, we will review highlights from the study findings and recommendations to inform future CPD programs. We will also provide a handout of the research materials for CPD offices with an interest in replicating this study.

OC2-1-3-60263

A Qualitative Study on the Educational Needs of Family Physicians Regarding Quality Improvement in Newfoundland and Labrador

Heidi Coombs Memorial – University of Newfoundland, **Cheryl Etchegary** Quality of Care NL/Choosing Wisely NL, **Tobias Gelber** Health Innovation Group, **Xiaolin Xu** Memorial – University of Newfoundland, **Karla Simmons** Memorial – University of Newfoundland

Background/Purpose: Primary healthcare providers in Newfoundland and Labrador maintain large, busy practices and face significant challenges to effectively managing their practices and providing timely, quality care. This study explored the perspectives of family physicians and the experiences of patients in accessing primary healthcare. The results have informed the development of a longitudinal education and support plan for family physicians in Newfoundland and Labrador.

Methods: Three data gathering methodologies were used, including an environmental scan, focus groups with family physicians (n=35) and patient representatives (n=8), and key informant interviews with stakeholders in primary care (n=10) and representatives from other jurisdictions in Canada (n=8). Thematic analysis was adopted in the study.

Results: The most significant challenges and barriers for family physicians include maintaining large practices of patients with complex health needs, financial management and the Fee for Service Model, information management and technology, and human resource management. Barriers identified by patients include the lack of timely access, patient-centred care, and team-based care. The key informants recommended simplifying and specifying improvements, maintaining positive professional relationships, building on readiness for change, and enabling family physicians to engage in educational activities and support.

Conclusions: This study identified four main educational needs of family physicians, including enhancing patient safety and care, practice effectiveness and efficiency, quality improvement, and team-based care. The findings have important implications for developing an education and support plan to enhance the efficiency, cost-effectiveness, and sustainability of primary healthcare.

OC2-1-4-60528

Interactive Learning in Continuing Education Conferences

Tanya MacLeod Dalhousie University, **Diana Sanchez-Ramirez** University of Manitoba, **Christine Polimeni** University of Manitoba, **Constance LeBlanc** Dalhousie University, **Dori Rainey** University of Manitoba

Background/Purpose: Education standards for accredited continuing professional development (CPD) require that programs dedicate a minimum of 25% of time to interactive learning. Anecdotal evidence suggests that CPD conferences rely heavily on end-of-lecture question and answer (Q&A) periods to fulfill this standard. Little is known or described in the literature about interactive approaches in real-world conferences. The purpose of this study was to explore interaction during CPD conferences with a focus on the Q&A period.

Methods: Data were collected from 49 CPD conference lectures in Nova Scotia and Manitoba. Attendance ranged from 139-320 healthcare providers. In each lecture, an observer used an evidence-informed field guide to record information.

Results: On average, lectures were 46 minutes, with 7 minutes for the Q&A period. In NS, 66% (12/18) of speakers ran out of time or did not have any Q&A; MB used an online Q&A format (Slido) and 100% (31/31) of speakers included Q&A, however, back-and-forth dialogue in the conference setting was not observed. Assuming that the Q&A period was the only interaction that occurred, interactivity accounted for a mean of 15% of the allotted time for the session (18% in Manitoba and 11% in Nova Scotia).

Conclusions: Results suggest that most conference lectures do not meet the minimum for interactivity using the Q&A period only. In this presentation, we will share findings of the nature of Q&A in conference lectures, and other forms of interaction that were observed. This study has important implications for faculty development and the delivery of CPD in conference settings.

OC2 – 2 Postgraduate

OC2-2-1-59976

The Attitudes of Canadian Ophthalmology Residents and Pre-Clerkship Medical Students at an Ontario Medical School Towards Homeless Individuals: A Cross-Sectional Study

Aman Sayal University of Toronto, **Marko Popovic** University of Toronto, **Majd Mustafa** McGill, **Stephen Hwang** University of Toronto, **Myrna Lichter** University of Toronto

Background/Purpose: Homeless individuals experience visual impairment at rates much higher than the general population. This cross-sectional study assessed the attitudes of Canadian ophthalmology residents(PGY1-5) and pre-clerkship medical students(year 1 and 2) at the University of Toronto, towards homeless individuals.

Methods: Residents and students were invited to complete the Health Professionals' Attitudes Towards the Homeless Inventory(HPATHI) tool to assess attitudes, interests and confidence in working with the homeless population on a 5-point Likert scale. Comparisons were made between residents and pre-clerkship learners and between junior and senior residents using the Fisher's exact test and Mann-Whitney U test.

Results: Responses were received from 114 of 220 ophthalmology residents(52%) and 315 of 534(59%) pre-clerkship medical students. Residents had significantly more negative overall attitudes(pre-clerk median=4.4, resident median=4.1, both still indicating positive attitudes) and interests(pre-clerk median=4.0, resident median=3.3, residents with more neutral interests) towards working with the homeless population compared to pre-clerkship students. Using both statistical methods, beliefs were significantly more negative in 7 of 9 'Attitude' items, 5 of 5 'Interest' items and 1 of 4 'Confidence' items. Ophthalmology residents were more positive in 1 of 4 of the 'Confidence' items. Attitudes were similar across PGY1-5 training years, except PGY4 and PGY5 residents were more negative than PGY1-3 residents on 1 of 5 'Interest' items.

Conclusions: Ophthalmology residents have an at least neutral perception of individuals experiencing homelessness, while medical students have a more positive opinion. Studies exploring optimal ways to advocate for this population are needed for Canada's eye-care trainees.

OC2-2-3-60523

"One step away from 'you don't know what you're doing'": A qualitative study exploring perspectives of uncertainty among residents and early career clinicians

Taryn Taylor Western University, **Brittany Dellar** Western University, **Simranjot Sehgal** Western University, **Chris Watling** Western University, **Sayra Cristancho** Western University

Background/Purpose: Current competency frameworks reflect the inevitability of uncertainty in clinical practice. Such frameworks emphasize that all trainees must learn to recognize and respond to uncertainty. Yet it remains unclear how trainees can learn this skill when the dominant ethos of medical training equates competence with absolute certainty. Thus, we sought to explore how early career clinicians (ECC) and residents understand the significance of clinical uncertainty and its relationship with competence.

Methods: Using Constructivist Grounded Theory, we conducted semi-structured interviews with 13 residents and 11 ECC (n=24), from ten different specialties. Iterative data collection and analysis directed constant comparison and theoretical sampling to sufficiency.

Results: Our analysis developed three main dimensions of uncertainty: (1) Trajectories of uncertainty, (2) Performances of (un)certainty and 3) Pedagogies of uncertainty. Trajectories captured the dynamic, non-linear relationship between uncertainty and experience. Performances highlighted how declarations of uncertainty are often constrained by gendered social norms and other implicit biases. Pedagogies identified the predominantly informal curriculum that shapes how our participants made inward and outward judgements of competence in light of uncertainty.

Conclusions: Our analysis reveals a complexity that is not captured by existing competency frameworks, which position "managing uncertainty" as a skill that is straightforwardly mastered during training. Rather, our participants described a non-linear evolution in how they both managed and understood the significance of uncertainty in their clinical practice. A lack of intentional, structured curriculum enables implicit biases about uncertainty and its relationship with competence to persist.

OC2 – 3 Undergraduate

OC2-3-1-60273

Evaluation of a Pilot Addiction Medicine Week Created for and by Pre-Clerkship Medical Students

Robin Glicksman University of Toronto, **Melissa Tigert** University of Toronto, **Hilary Stone** University of Toronto, **Ruby Alvi** University of Toronto, **Peter Selby** University of Toronto, **Azadeh Moaveni** University of Toronto, **Joyce Nyhof-Young** University of Toronto

Background/Purpose: Medical students receive limited exposure to substance use disorders (SUDs) throughout their undergraduate medical training, despite its prevalence in society. At the University of Toronto, a pilot week-long extra-curricular program in addiction medicine was developed by medical students for pre-clerkship students to enhance their SUD knowledge, skills and attitudes to better prepare them for clinical practice.

Summary of innovation: Curriculum objectives were created to reflect the CANMEDs roles. The novel curriculum included half didactic and half clinical shadowing experiences. Didactic lectures and workshop topics included: the biopsychosocial model of addiction, motivational interviewing, harm reduction care models, naloxone training and stigmatization of addiction disorders. The clinical course component involved placements at residential treatment facilities, in-patient hospital services, rapid access clinics and specialty addiction medicine placements (e.g. substance use in pregnancy clinics, etc.). The curriculum was evaluated using a mixed-method design, and all learning objectives were addressed, as determined by qualitative analysis. During the COVID-19 pandemic, the program was shifted to a virtual format.

Conclusions: Participants reported being highly satisfied with the program, and felt the clinical exposure was invaluable for skills building, career exploration, and understanding stigma and the patient experience. In addition, participants felt that program stimulated personal and professional growth, and introduced them to forms of advocacy for this vulnerable population. Key learning points included prioritizing patient and family member perspectives. Overall, participants felt the week initiated a change for their future practice and felt that all medical students should have similar exposure to addictions medicine.

OC2-3-2-60569

Autopsy of a Longitudinal Integrated Clerkship: An Organizational Process Analysis of a Clerkship Program's Demise

Clare Hutchinson University of Toronto, **Abdollah Behzadi** University of Toronto, **Natalie Clavel** University of Toronto, **Ra Han** University of Toronto, **Adam Kaufman** University of Toronto, **Piero Tartaro** University of Toronto, **Kulamakan Kulasegaram** University of Toronto, **Maria Martimianakis** University of Toronto, **Maria Mylopoulos** University of Toronto, **Stacey Bernstein** University of Toronto

Background/Purpose: In 2014 the University of Toronto launched a multi-site, urban longitudinal integrated clerkship (LInC), encompassing all medical and surgical disciplines. After expanding to 10% of the class in seven sites, this pilot program was terminated in 2018. This descriptive study outlines the reasons for the program's discontinuation using an organizational processes framework.

Methods: As co-creators of the program, we identified several factors that led to the program's collapse. Based on our observations and qualitative analysis of focus group transcripts, we have described our findings related to the structural, human resource, symbolic and political challenges.

Results: Structurally, the co-existence of LInC and block clerkship within the same hospitals created confusion and competition for scarce clinical resources. From a human resource perspective, the program carried a significant administrative burden to allow for the creation of personalized daily schedules for each LInC student. Symbolically LInC represented the promotion of heightened humanism in medicine. Paradoxically this holistic emphasis was perceived as both less rigorous compared to traditional block clerkship, and as an invalidation of block student interpersonal skills. Politically, LInC created issues of equity among the medical school class, due to the significant resources allocated to a small minority of the class perceived as being treated preferentially.

Conclusions: LInC challenged the culture of our large, traditional medical school. Despite the program being highly successful clinically, asking students to choose between two parallel clerkship curricula co-existing in the same institution proved unsustainable. We are planning on bringing the most impactful elements of the program to the entire medical school class.

OC2-3-3-60008

Factors Impacting Medical Student Comfort with Procedural Skills

Bright Huo Dalhousie University, **Wyatt MacNevin** Dalhousie University, **Dr. Stephen Miller** Dalhousie University, **Michael Smyth** Dalhousie University

Background/Purpose: Medical students entering clerkship may have low confidence and high levels of anxiety in performing common procedural skills. Increasing opportunities for skills exposure may improve medical student confidence in procedural skills performance prior to clerkship. The impact of career interest and elective choice on pre-clerkship student comfort with procedural skills is unclear. This study examines the relationship between student procedural skills comfort, career interest and elective choices.

Methods: Surveys were completed by 53 second year Dalhousie medical students. A 5-point Likert scale was used to evaluate students' exposure, comfort, and motivation to learn common procedural skills. Descriptive and quantitative analysis methods were performed.

Results: Medical students (>60%) reported poor comfort levels for most skills, despite >80% of students rating high motivation to learn them. Elective choice impacted student comfort levels as students who completed electives in anesthesiology were more comfortable with performing intubation (23% vs 10%, p = 0.026) and IV insertion (38% vs 13%, p = 0.002). Most participants (60%) reported low exposure to basic skills including phlebotomy (62.2%), breast exam (62.3%), bag mask ventilation (64.2%), Digital Rectal Exam (DRE, 64.2%) and throat swabbing (79.2%).

Conclusions: This study supports that medical students feel low levels of comfort with performing procedural skills despite high motivation for learning. Comfort was influenced by both career interest and elective experience. Programs aiming to increase students' comfort levels in performing procedural skills should adapt curricula toward increasing early exposure to these skills.

OC2-3-4-60829

Steps towards building psychological safety within the Faculty of Medicine & Dentistry at the University of Alberta

Penelope Smyth University of Alberta, **Blaine Aucoin** University of Alberta, **Hanne Ostergaard** University of Alberta, **Pamela Brett-MacLean** University of Alberta

Background/Purpose: In Canada, psychological safety is mandated within the workplace. Despite regulations, anonymized graduating learner surveys continue to identify the presence of mistreatment, while learners report fear of reporting mistreatment. In 2019, the professionalism committees within the Faculty of Medicine & Dentistry (FoMD) initiated early steps directed to creating a culture of psychological safety for all workplace members, to support more open dialogue around professionalism and treatment of others in our workplace, from learners through faculty.

Summary of innovation: Members of FoMD professionalism committees, along with internal and external FoMD stakeholders, met at a psychological safety retreat to answer three questions: (1) What is a psychologically safe workplace, and how does it impact you?; (2) What do you perceive to be the barriers in shifting FoMD culture?; and (3) What are some opportunities we could build upon to start moving towards psychological safety within the FoMD workplace? Small group-generated barriers and opportunities were themed into the 13 psychosocial factors, then prioritized through anonymous stakeholder individual survey ranking. The top nine identified barriers & actionable opportunities were then organized into four key implementation priorities: 1) Faculty Structure; 2) Faculty Development; 3) Faculty Communication Strategy; and 4) Individual Stressors. Progress of working groups, through the COVID-19 pandemic and an unprecedented period of academic restructuring at the University of Alberta, is described.

Conclusions: To build a culture of psychological safety for all members of an academic medical workplace, initiatives must translate stakeholder views into structured actions in a safe, transparent, and accountable manner.

April 18th, 2021 - 12:00 EST
OC3–1 Teaching & Learning-Feedback

OC3-1-1-60661

In Support of Meaningful Assessment and Feedback: A Study of 'Reasoning Tasks' Used During Case Review in the Ambulatory Setting

Radha Joseph McMaster University, **Jacqueline Torti** Western University, **Kristen Bishop** Western University, **Mark Goldszmidt** Western University

Background/Purpose: Faculty and trainees are familiar with clinical tasks, but less familiar with metacognitive 'reasoning tasks' that influence clinical task performance. As part of a multi-phase study exploring reasoning tasks across internal medicine settings, the purpose of this study is to explore patterns of reasoning tasks used in ambulatory geriatric clinics.

Methods: Data consists of 18 audio-recorded case review discussions between 4 geriatricians and 11 trainees (medical students, residents and fellows). Transcript analysis included constant comparison and template analysis using a previously validated list of 3 overarching and 23 supportive reasoning tasks.

Results: The most addressed reasoning tasks reflect the nature of this specialty: trainees emphasize precipitants to the current problem, explore physical and psychosocial consequences of the current conditions or treatment, and may formulate tentative management plans contextualized to the psychosocial. Faculty refine management plans by weighing alternative treatment options, considering the impact of comorbid illness on management and vice versa. They also demonstrate expertise with the healthcare system via collaborative practices and navigation of resource constraints. Theoretically, 2 new reasoning tasks were identified: 1) consider the quality of the data source, including credibility, reliability and other barriers to effective data collection; 2) determine the need for further data gathering.

Conclusions: Developing a shared language around reasoning tasks will support trainee preparation and development, through more explicit feedback around patterns of omission and inter-specialty differences. Understanding which tasks are commonly addressed by trainees vs. faculty can also help delineate the competency continuum and support assessment design.

OC3-1-2-60690

Findings from the Implementation of a Modified R2C2 Model of Feedback for Psychiatry Residents within a Competency-based Medical Education Framework

Shaheen Darani University of Toronto, **Anupam Thakkur** University of Toronto, **Yasmin Lalani** University of Toronto, **Sophie Soklaridis** University of Toronto, **Ivan Silver** University of Toronto, **Csilla Kalocsai** University of Toronto, **Sanjeev Sockalingam** University of Toronto

Background/Purpose: Coaching and feedback are crucial to facilitate progress for residents. R2C2 is a validated model of feedback comprising of four iterative phases (building relationship, exploring reactions, exploring content, coaching). This study reports on the implementation of a modified iteration of the model in a competency-based medical education (CBME) context. The Consolidated Framework for Implementation Research (CFIR) was used to identify factors that influenced intervention, implementation and effectiveness. The modified R2C2 model encourages supervisors to reflect on power dynamics within the supervisor-resident relationship, whilst using all other elements of the original model.

Methods: Supervisors received training in the modified R2C2 model. During implementation, support from educational leaders was available to help supervisors solidify their learning. Semi-structured interviews were conducted with supervisors (n=9) to understand their experience of using the model and the implementation process.

Results: Using a grounded theory approach, results from supervisor interviews revealed factors associated with the process of implementing an educational initiative. Participants also highlighted a need to consider power-dynamics in the supervisor-resident relationship.

Conclusions: The supervisors' experiences of the modified R2C2 model offer promising insights for considering the implementation supports needed to sustain programmatic feedback. This study will be of interest to supervisors or other clinical leaders who aim to implement structured feedback practices within a CBME framework.

OC3-1-3-60136

Feedback Delivery in an Academic Cancer Centre: Reflections From an R2C2-based Microlearning Course

Amir H. Safavi University of Toronto, **Janet Papadakos** Cancer Education, Princess Margaret Cancer Centre, **Tina Papadakos** Cancer Education, Princess Margaret Cancer Centre, **Naa Kwarley** Quartey Cancer Education, Princess Margaret Cancer Centre, **Karen Lawrie** Cancer Education, Princess Margaret Cancer Centre, **Eden Klein** Cancer Education, Princess Margaret Cancer Centre, **Sarah Storer** Cancer Education, Princess Margaret Cancer Centre, **Jennifer Croke** University of Toronto, **Barbara-Ann Millar** University of Toronto, **Raymond Jang** University of Toronto, **Andrea Bezjak** University of Toronto, **Meredith E. Giuliani** University of Toronto

Background/Purpose: There is longstanding evidence of feedback competency deficiencies in supervisors in medical education. Enhancing feedback delivery skills is a critical aspect of competency-based medical education. R2C2 (relationship, reaction, content, coaching) is an increasingly adopted evidence-based model for feedback delivery. The purpose of this study was to assess the feasibility and utility of an R2C2-based microlearning course and to solicit multidisciplinary staff perspectives on current feedback delivery practice in an academic cancer centre.

Methods: A prospective longitudinal qualitative design was utilized. Five staff (three oncologists and two allied health professionals) with supervisory roles were selected by purposive sampling. Each staff participated in four semi-structured interviews conducted pre- and immediately post-course, and at one- and three-months post-course. Interviews were audiotaped and transcribed verbatim. Transcripts were coded using an abductive approach informed by the R2C2 model.

Results: All participants found the course to be time feasible and completed it in 10-20 minutes. The course was deemed to be useful and fulfill a perceived need for feedback training in the cancer centre. Relationship building and exploring reactions were the R2C2 domains most discussed during post-course interviews. Several relationship-oriented themes were generated: 1) hierarchical and interdisciplinary relationships modulate feedback delivery 2) interest in feedback delivery varies by duration of the supervisory relationship 3) the perceived transactionality of supervisor-trainee relationships influences feedback delivery.

Conclusions: An R2C2-based microlearning course is feasible and deemed useful by multidisciplinary cancer centre staff. Optimization of the course and further

characterization of current feedback practices in the cancer centre are ongoing.

OC3-1-4-60576

Perceptions of Resident feedback Among Medical Students

Shannon Wong University of British Columbia, **John (Cong) Luo** University of British Columbia, **Rose Hatala** University of British Columbia

Background/Purpose: Feedback is a valuable component of medical education. The majority of studies investigating effective feedback have focused on faculty-learner dyads. In clinical education, residents play a pivotal role in providing feedback to medical students, but no studies have explored resident-student feedback encounters. Our objective was to gain a deeper understanding of medical students' perceptions of resident-led feedback.

Methods: In this pilot study, we used a qualitative research design informed by phenomenology. We conducted 5 semi-structured one-on-one interviews with fourth year UBC medical students. Interviews were transcribed and anonymized, and then read independently by each co-author. We collaboratively developed and applied initial codes to all transcripts. We then iteratively analyzed the data using thematic analysis to organize the codes into themes and subthemes.

Results: We identified several themes, including relationships and outcomes, which provide novel insight into student-resident feedback interactions. Students value supportive resident relationships, as they were associated with positive emotional responses. Direct observation was a useful tool employed by residents to help students feel well-supported. As well, a strong interpersonal relationship positively impacted students' learning goals. Students perceived resident feedback as focused on their growth, in contrast to faculty feedback, which was often perceived as having an assessment focus.

Conclusions: Our pilot study provides some insights into how and why students value feedback from residents. Explicit strategies on how to build supportive student-resident relationships and incorporate direct observation into routine clinical practice may be needed for residents-as-teachers in order to engage in meaningful feedback conversations with students.

OC3 – 2 Teaching & Learning - Novel Approaches

OC3-2-1-60478

F-SOAP: A simple model to teach oral case presentations to medical students

Anthony Seto University of Calgary, **Katie Lin** University of Calgary

Background/Purpose: Presenting clinical cases orally is a critical skill in medical teaching, yet learners may find it to be one of the most challenging and intimidating interactions to have with preceptors. Introducing learners to an organized, structured oral case presentation model may enhance their preparedness and confidence in this skill.

Summary of innovation: To fulfill this goal, the F-SOAP model (Frame, Story, Objective, Assessment, Plan) was created by adapting the SOAP notes method of clinical documentation. The F-SOAP presentation approach was taught to second-year medical students through a pre-recorded podcast, which discussed the model and included two case-based simulation exercises. Students then used an evaluation checklist to facilitate self-reflection. 153 second-year medical students were surveyed post-workshop to reflect on the impact of the F-SOAP model. Students' (n=66) confidence in oral case presentation skills increased significantly (p<0.001) pre- vs post-session (mean 2.59 to 3.55/5.00; mode 2.00 to 4.00/5.00) with a large effect size (Cohen's d=1.10). Additionally, 94% of students (n=66) found the F-SOAP model to be "useful" or "very useful"; the "usefulness" was rated a mean of 4.41/5.00 and was bimodal at 4.00/5.00 and 5.00/5.00. 100% of students (n=64) planned on using the F-SOAP model for future case presentations to preceptors.

Conclusions: F-SOAP (Frame, Story, Objective, Assessment, Plan) is a simple, structured tool that appears effective in improving medical student confidence with oral presentation skills. Prior to introducing F-SOAP, medical students expressed low to neutral confidence in presenting cases, identifying the need for a presentation approach (i.e. F-SOAP) to practice and build confidence for presentations.

OC3-2-2-60474

Evaluation of a Student-Led Global Health Certificate Program: A Mixed Methods Study

Khalidha Nasiri Western University, **Jenny Lee** Western University, **Jelena Poleksic** Western University, **Divya Santhanam** Western University, **Anita Cheng** Western University

Background/Purpose: Globalization and demand from medical students call for global health training opportunities that build proficiency to care for diverse patient populations. There is currently a lack of research on the impact of Canadian global health training programs for medical students.

Summary of innovation: A student-led Global Health Certificate Program (GHCP) was developed using evidence-based recommendations and AFMC-mapped competencies in the principles of global health and social medicine. It is delivered through advocacy training, lectures/workshops, and experiential projects. We evaluated the impact of the GHCP on student perspectives and global health competencies using an online mixed methods survey of 115 medical student participants conducted before and after the program.

Conclusions: Participants reported knowledge improvements in 5 of 6 AFMC competencies. A majority reported a moderate/major impact on all CanMEDS competencies (range: 53.3% to 84.4%) and most reported a positive impact on personal development outcomes (range: 44.4% to 84.4%). Qualitative themes identified were that the GHCP expanded the meaning and role of physicians; filled a knowledge gap in current medical education curricula; assisted with future career development; increased community involvement; and provided insight into the local nature of global health. Areas for improvement were providing more opportunities to apply skills and to have the program formally recognized on their MSPR or transcript. These results demonstrate that participants perceived value in their experience. This study establishes an evaluation for a GHCP that can serve as a model for Canadian medical schools to use for students seeking in-depth experience and training in global health.

OC3-2-3-60479

IP&C 2.0: An online, interactive curriculum to engage and teach medical students in Infection Prevention & Control practices

Anthony Seto University of Calgary, **Nicole Ertl** Alberta Health Services, **William Kennedy** University of Saskatchewan, **Paul Bryan** University of Calgary, **Dione Kolodka** Alberta Health Services

Background/Purpose: Occupied with learning biomedical content, medical students may not be as motivated to learn about Infection Prevention & Control (IP&C). To better motivate and engage learners, we developed IP&C 2.0. This online curriculum is grounded in the self-determination theory, which posits that motivation

requires the needs of competence, autonomy, and relatedness met. In IP&C 2.0, competence is achieved through educational puzzles, autonomy through choice in task completion order, and relatedness through peer collaboration.

Summary of innovation: A multidisciplinary healthcare panel (student, resident, physician, nurse, IP&C practitioner) identified a list of IP&C knowledge (e.g. isolation precautions) and skills (e.g. hand hygiene) thought to be essential for medical students. This list was further refined to align with the Medical College of Canada's learning objectives. Teams of maximum 5 students worked through 4 learning stations of puzzles and activities on Google Forms, via Zoom breakout rooms. They tackled stations in any order. Afterwards, teams regrouped in the Zoom lobby, competing in a Kahoot quiz to immediately apply and retrieve learned knowledge. Students' evaluation (n=65-66) of self-efficacy for session objectives significantly increased (p<0.001, one-tail repeated-measures t-test) pre- vs. post-session from 3.28/5.00 to 4.21/5.00, with large effect size (Cohen's d=1.10). Average satisfaction scores (n=67) were 3.72/5.00 and 5.00/5.00 for mean and mode, respectively.

Conclusions: The IP&C 2.0 online curriculum incorporates active learning and collaboration through interactive puzzles and activities. Educators can consider incorporating online puzzles to engage and teach content relevant to clinical practice, as this gamified approach improved self-efficacy and was rated overall satisfactory by medical students.

OC3–3 Teaching & Learning-Undergraduate

OC3-3-1-60589

Health Empathy Map: Creation of an Instrument for Empathy Development

Aline Barbosa Peixoto José do Rosário Vellano University, **José Maria Peixoto** José do Rosário Vellano University, **Eliane Perlatto Moura** José do Rosário Vellano University

Background/Purpose: Empathy is a multidimensional construct that requires the ability to perceive and understand the others' perspectives, as well as feel their emotional state. It is an intellectual skill to be learned and represents one of the domains of emotional intelligence. There are few studies on structured methods for teaching and practicing empathy in care settings. Some students report difficulties in coordinating the cognitive knowledge necessary for care and still consider the patient's

perspective. The XPLANE, a business design thinking-company, developed the Empathy Map to be used when one need to immerse oneself in a user's environment. The aim of this study was to create an instrument for teaching and practice of empathy skills in medical education, called the Health Empathy Map (HEM).

Summary of innovation: The aim of this study was to create an instrument for practice of empathy in medical education. This study had 3 phases: Adaptation of XPLANE's Empathy Map for medical education; Adequacy of the instrument content and feasibility performed by teachers from José do Rosário Vellano University and then by focal group and 3ª-year medical students during outpatient clinic practice and in the tutorial group.

Conclusions: The adequacy of the instrument for medical education was based on empathy framework: perspective-taking, emotional sharing, and empathetic concern. The final version was considered by participants as an educational instrument with great instructional potential in medical education. This is an innovative instrument, simple and easy to apply, that can get a student to focus on the patient feelings and needs.

OC3-3-2-60719

When Patients Teach Empathy - A Systematic Review of Training for Medical Students

Alex Lee University of Ottawa, **Mina Boshra** University of Ottawa, **Man Ting Kristina Yau** University of Ottawa, **Elise Malek-Adamian** University of Ottawa, **Isaac Kim** University of Ottawa, **Kori Ladonna** University of Ottawa

Background/Purpose: Despite growing emphasis on patient-centered care, numerous studies have demonstrated diminishing empathy in medical students as they progress through their medical education. Involving patients as educators in medical curricula has been proposed as a solution. Therefore, this systematic review was conducted to evaluate patient-involved interventions aimed at promoting empathy among undergraduate medical students.

Methods: A literature search of MEDLINE, Embase, PsycINFO, and ERIC databases was performed using the keywords "empathy", "medical student", and their synonyms. Results were independently screened in duplicate and conflicts were resolved by group consensus. Any studies in English describing interventions aimed at promoting empathy in medical students by utilizing patients as educators were included. Relevant data were extracted and summarized.

Results: Of the 1467 studies screened, 14 studies were included, 11 of which were pilot studies. Studies included patient educators in storytelling (5/14), shadowing for students (3/14), recorded videos (3/14), or a combination of methods (3/14). Empathy was most frequently measured using qualitative techniques (e.g., written feedback, interviews) or the Jefferson Scale of Empathy, and all studies demonstrated improvements in empathy among medical students. Participants reported satisfaction with training and acknowledged its relevance to medical humanities and patient-centered care.

Conclusions: Interventions utilizing patient-educators can improve empathy among medical students. Shared culture around patient-centered care must be supported by patient-driven medical education beyond simple pilot projects and feasibility studies.

OC3-3-4-60513

Teaching learning by concordance (LbC) methodology via a virtual workshop

Marie-France Deschesne Université de Montréal, **Veronique Phan** Université de Montréal, **Margaret Henri** Université de Montréal, **Genevieve Gregoire** Université de Montréal, **Bernard Charlin** Université de Montréal, **Tania Riendeau** Université de Montréal

Background/Purpose: The COVID pandemic has forced medical schools to create educational material to palliate the anticipated and observed decrease in clinical exposure during clerkship. Learning by concordance (LbC) is a novel educational approach that places learners in authentic situations and enable them to compare their answers to those of expert panelists. We wanted to teach this approach to educators, to enable them to create clinical vignettes and questions for 3rd and 4th year students. The goal was the creation a web-based bank of LbC-based vignettes and questions to elicit clinical reasoning.

Summary of innovation: A three-hour virtual workshop with two experts in LbC was held last July with participants from mandatory clerkship rotations (faculty and residents), who were trained to the LbC methodology. After the workshop, participants had 1 month to create clinical vignettes, related questions and educational rationales using LbC. The vignettes centered around learning objectives expected to be less frequently encountered during clinical rotations. The questions were revised by the LbC experts and sent to a panel of experts. Results Twenty participants to the workshop created a total of 72 vignettes, 275 questions and rationales which were answered by 25 expert panelists. At the end of the

process, this new educational material will be accessible to clerkship students on a web-based platform.

Conclusions: After a 3-hour workshop, faculty at our medical school was able to create a significant quantity of LbC based clinical reasoning educational material for clerkship.

April 18th, 2021 - 15:30 EST
OD1 – 1 Leadership

OD1-1-1-60605

Beyond "mini-me" and #MeToo?: An environmental scan of physician leadership programs that include concepts of diversity, gender and race.

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Background/Purpose: Current literature indicates that there is a lack of training for physicians in relation to equity, diversity and inclusion (EDI).This can impede physicians' ability to lead a diverse workforce, representing a barrier for certain groups to obtain positions of power within medicine. To explore this gap, we conducted an environmental scan to understand current trends in physician leadership training with regard to EDI.

Methods: We used a three-pronged approach to provide a nuanced portrayal of current training initiatives; scanning medical education conferences, physician leadership programs and peer reviewed literature. Working with a librarian, we searched grey literature from 2015 to 2020 and peer reviewed literature from 2013 to August 2020. Reviewers extracted relevant data independently using standardized abstraction sheets, before interpreting findings as a group.

Results: Although integrating EDI concepts into leadership programs could hold great promise for redressing health inequalities, our findings indicate that EDI content was generally absent from programming A relatively low number of sources featured EDI programming, with only 20 of 3877 studies screened meeting this criteria. A closer narrative examination of specific physician leadership programming is provided.

Conclusions: The apparent lack of EDI content in physician leadership training is troubling, given the trend towards rapid racial/ethnic diversification in North America. The findings provide CME/CPD educators an opportunity to make more strategic decisions regarding the content of physician leadership training given the identified gaps. We present these considerations along with implications for the wider literature, practical applications for CME/CPD initiatives, and the methodological limitations/challenges encountered during this work.

OD1-1-2-60792

Perceived Effectiveness of a Graduate Education Degree for Health Professionals: A Program Evaluation

Toni Ungaretti Johns Hopkins University, **Jennifer Amadio** University of Toronto, **Ronish Gupta** McMaster University

Background/Purpose: The evolving needs of health education has led to a substantial increase in healthcare professionals in Canada and around the world pursuing formal graduate training. Healthcare specific graduate programs, while increasing in number and popularity, remain in their infancy relative to traditional graduate education programs. It is prudent to understand whether Master of Education degrees for the health professions result in improved educational leadership/innovation for graduates.

Summary of innovation: The Master of Education in the Health Professions (MEHP) program at Johns Hopkins University conducted a program evaluation involving alumni from 2011 (inception) until 2017. Survey responses were analyzed descriptively and interview content analyzed thematically by the School of Medicine Office of Assessment and Evaluation. Of 63 successful graduates, 31 (49%) and 9 (14%) provided survey and interview data respectively. The majority reported that the MEHP effectively prepared them for the roles of "educator" (26/31, 84%), and "education leader" (19/31, 61%). Effective program aspects highlighted by alumni were learning curriculum development, instructional strategies, as well as networking with students and instructors. Views on research experience/exposure were mixed with 7 alumni desiring more (22.6%) and 12.9% finding research coursework as the least valuable component.

Conclusions: This single centre evaluation suggests that focused graduate programs in health professions education lead to the development of meaningful skills in their graduates. Topics such as curriculum development should be considered essential and warrant substantial time and attention. Others, such as research have the

potential to be useful but should be carefully designed to assure applicability to health professions education.

OD1-1-3-60623

Innovation Procurement: CPD Program and Knowledge Translation

Eleftherios Soleas Queen's University, **Jenny Debruyn** Queen's University, **Klodiana Kolomitro** Queen's University, **Laurilain Gamalinda** Queen's University, **Iris Ko** Georgian College, **Richard van Wylick** Queen's University, **Angela Coderre-Ball** Queen's University, **Nancy Dalgarno** Queen's University

Background/Purpose: The Innovation Procurement program was an accredited blended learning opportunity organized by the Queen's Professional Development Office in partnership with the Kingston Health Sciences Centre. The goal of the collaboration was to develop the innovation procurement strategies of practitioner-decision makers in units of KHSC to procure high-efficacy solutions addressing healthcare challenges such as COPD, diabetes, opioid dependence, and cancer care.

Summary of innovation: A needs assessment was conducted to establish the educational needs of physicians, allied healthcare professionals and healthcare administrators involved in innovation procurement strategies (IPS). The needs assessment featured two stages: (i) a systematic review of grey literature, and (ii) semi-structured interviews with healthcare professionals, Ontario health agencies, and procurement centres with varying IPS experience. The accredited educational program included an online foundational module and a one-day, face-to-face workshop for healthcare professionals and administrators. A mixed-method evaluation of the educational program revealed that the vast majority of participants believed that the online module and face-to-face workshop were effective educational initiatives that both improved IPS knowledge and was immediately useful to them in their current work environments.

Conclusions: Recommendations for improvement centered on increasing the time spent on interactive activities, simplifying the case studies, better connecting each section of the workshop, and providing cases prior to the workshop. This program was found to increase physician and leader capacity to effectively define problems as well as ask the right questions leading to more efficacious solutions enhancing patient-centred care.

OD1-1-4-60928

Key drivers of social accountability in medical schools: Perspectives across leadership, faculty and students

Erin Walling University of Saskatchewan, **Kira Koepke** University of British Columbia, **Eric Lachance** Université de Sherbrooke, **Robert Woollard** University of British Columbia, **Lisa Yeo** University of Calgary

Background/Purpose: Across Canada, social accountability is expected to be interwoven into medical education, guided by values of equity, social justice, and community engagement. All Canadian medical schools have taken on this challenge, but in different ways. A collaborative study using an appreciative inquiry approach was conducted to examine how schools are putting social accountability into action.

Methods: An appreciative inquiry-based research design was employed in a two-part study. Semi-structured interviews with key informant leaders (phase 1) and focus groups sessions with "front-line" students, faculty and staff (phase2) from 10 of the 17 Canadian medical schools (n=41 individuals) were conducted over a two-year period. Qualitative thematic analysis led to the identification of 10 key themes.

Results: Key drivers of social accountability in Canada were found to include accreditation standards, visionary leadership, contextually-relevant vision and mandate, champions, authentic community engagement, cultural humility, admissions policies, community-based learning, supportive organizational structure and measurement. Thematic analysis revealed that leadership is a necessary but not sufficient factor in successful progress towards social accountability; student and community-driven work is also necessary. The relationship triad of community-leadership-student was found to be particularly crucial for driving positive change in social accountability in Canada.

Conclusions: Leadership, students, staff and faculty in Canadian medical schools share similar perspectives regarding the key drivers of social accountability. Appreciative inquiry was a useful methodology in building a greater understanding around how schools are actioning social accountability values.

OD1–2 Distributed Medical Education

OD1-2-2-60887

Essential Features and Priorities for Distributed Medical Education: The Final Delphi Results (Part 1)

Charles Penner University of Manitoba, **Peggy Alexiadis-Brown** Dalhousie University, **John Murray** University of Manitoba

Background/Purpose: The AFMC Distributed Medical Education (DME) Resource Working Group sponsored Delphi consensus study on DME was undertaken to seek a consensus definition of DME, define key features of DME, and evaluate priorities for DME to expand.

Methods: The study used a consensus methodology in the form of a modified Delphi involving all 17 Canadian medical schools. Key themes were established through round 1. Rounds 2 and 3 pursued a definition of DME as well as ranking priority areas for further development of DME, essential features, internal/external pressures, and opportunities/barriers to DME. Semi-structured interviews were used in round two to establish context and provide clarity around themes.

Results: Rounds one, two and three had 88, 42, and 24 participants, respectively. Twenty-one semi-structured interviews were conducted. Although no consensus definition was reached, five essential features of DME were identified. They include: increased contribution of distributed sites to local governance (91.7%), engagement of local community physicians (88.1%), expansion of specialty training to distributed sites (87.5%), increased access to professional learning in community (82.9%), and the flow of faculty development funding directly to distributed sites (70.9%). The top three priority areas required to help develop DME nationally include developing social accountability metrics (58.3%), expanding distributed site authority over fiscal and teaching resources (54.2%), and establishing metrics to demonstrate comparable and equitable programs (50%).

Conclusions: The DME community is a heterogenous enterprise. The Delphi study shows that local ownership, autonomy, as well as community engagement are considered key features in DME programming. Developing social accountability metrics and accreditation are perceived as keys to DME's future.

OD1-2-3-60892

Pressures and Opportunities for Distributed Medical Education: The Final Delphi Results (Part 2)-

John Murray University of Manitoba, **Charles Penner** University of Manitoba, **Peggy Alexiadis-Brown** Dalhousie University

Background/Purpose: The AFMC Distributed Medical Education (DME) Resource Working Group sponsored Delphi consensus study on DME was undertaken in part to evaluate the internal/external pressures on DME and the major opportunities and barriers.

Methods: The study used a consensus methodology in the form of a modified Delphi involving all 17 Canadian medical schools. Key themes were established through round one. Rounds two and three pursued a definition of DME as well as ranking priority areas for further development or DME, essential features, internal/external pressures, and opportunities for DME. Semi-structured interviews were used in round two to establish context and provide clarity around themes.

Results: Rounds one, two and three had 72, 42, and 24 participants, respectively. Twenty-one semi-structured interviews were conducted. The top five pressures on further development of DME included heavy faculty teaching and clinical loads (83.3%), inadequate assignment of faculty (59.1%), lack of specific rural competencies (47.8%), lack of social accountability metrics (41.7%) and inadequately trained physicians for environments of greatest need (41.7%). Opportunities included promotion of rural generalism and a wider scope of practice (91.7%), faculty-level departments specializing in rural/remote medicine (75%), accreditation standards unique to rural/remote medicine (75%) and increased development of longitudinal integrated clerkships (70.9%).

Conclusions: The major threat to DME's future is the supply of enough faculty with enough time to teach. Major opportunities are the possibility of further promotion of generalism and changing the organization of faculties of medicine to include departments of rural/remote medicine with accreditation standards unique to this specialty.

OD1-2-4-60902

What is the Meaning of Distributed Medical Education?

Peggy Alexiadis Brown Dalhousie University**, Charles Penner** University of Manitoba, **John Murray** University of Manitoba

Background/Purpose: The meaning of the phrase Distributed Medical Education (DME) is unclear. Medical educators and administrators from a variety of medical schools have drawn upon existing terminology and personal experiences to develop definitions of what they believe DME is. This has made it difficult to develop a common definition so that DME can be studied and evaluated nationally. In response, a national study was conducted in order to develop a unifying definition of DME in Canada.

Methods: A 2-year national study used a Delphi consensus building iterative process to ascertain what DME is in Canada. The study included three rounds of surveys and interviews with over 94 respondents representing all 17 Faculties of Medicine in Canada. Findings were used to develop a DME definition model that consisted of 5 key areas. While the model provided a starting point for defining DME, it did not capture the contextual meaning associated with each area identified within the model. Using narrative data from the Delphi study, a qualitative study was conducted to explore the meaning and context associated with DME.

Results: Terminology used to define DME ranged from being prescriptive to theoretical. In some cases, DME was described in terms of how it was operationalized and/or evaluated, while in other cases it was described as a philosophical innovation.

Conclusions: Defining DME is challenging. While only a few of the study participants were able to find words to capture the essence of DME, most of the study participants were able to describe DME in terms of how, where and why it exists.

OD1 – 3 COVID - Pot pourri

OD1-3-1-60588

Using a Virtual Educational Model to Support Healthcare Professionals' Mental Wellbeing during the COVID-19 Pandemic

Sanjeev Sockalingam Centre for Addiction and Mental Health, University of Toronto, **Cheryl Pereira** Centre for Addiction and Mental Health, **Chantalle Clarkin** Centre for Addiction and Mental Health, **Javed Alloo** Nymark Medical Centre, **Victoria Bond** Centre for Addiction and Mental Health, **Mark Bonta** University of Toronto, University Health Network, **Heather Flett** Centre for Addiction and Mental Health, University of Toronto, **Andrea Furlan** University Health Network, **Jenny Hardy** Centre for Addiction and Mental Health, **Mona Loutfy** Women's College Research Institute, Women's College Hospital, University of Toronto, Maple Leaf Medical Clinic, **Sarah MacGrath** Centre for Addiction and Mental Health, **Maurey Nadarajah** Centre for Addiction and Mental Health, **Terri Rodak** Centre for Addiction and Mental Health, **Allison Crawford** Centre for Addiction and Mental Health, University of Toronto

Background/Purpose: Frontline healthcare professionals (HCPs) are at increased risk of experiencing psychological distress and negative mental health outcomes during and following public health crises. Tele-mentoring interventions have the potential to address HCPs needs for emerging evidence, while providing a sense of community and supporting self-care at a distance.

Summary of innovation: In March 2020, the Centre for Addiction and Mental Health launched Project Extension for Community Healthcare Outcomes-Coping with COVID (ECHO-CWC), a virtual educational program supporting Canadian HCPs during the COVID-19 pandemic. ECHO-CWC creates a virtual community of practice by connecting HCPs to an inter-disciplinary specialist team. Weekly sessions include a mindfulness exercise, "COVID-19 Q&A", resource update, didactic on social and clinical impact, and discussions of HCPs experiences and coping strategies. The aim of this initiative is to promote resilience, and reduce feelings of isolation and distress. ECHO-CWC featured a rapid design and implementation cycle using previously established ECHO implementation tools and processes based on the Consolidated Framework for Implementation Research. Curriculum was developed and finalized using a modified Delphi approach, with ongoing adaptations to topics in response to pandemic phases and emerging participant needs. 426 HCPs registered for ECHO-CWC within the first few weeks, with 32 participants attending the first session. Participant satisfaction ratings were high across the initial five sessions (mean=4.26/5).

Conclusions: Our experience using existing ECHO implementation frameworks and a rapid needs assessment approach has demonstrated that the ECHO tele-mentoring model can be quickly mobilized to address HCPs mental health needs during COVID-19.

OD1-3-2-60251

Increasing Equity, Diversity and Inclusivity during the COVID-19 Pandemic: Improving Interview Skills and Confidence for Underrepresented Minorities in Medicine through an Interview Preparation and Support Program

Farhan Mahmood University of Ottawa, **Johanne Mathieu** University of Ottawa, **Lolade Shipeolu** University of Ottawa, **Charnelle Djeukam** University of Ottawa, **Saada Hussen** University of Ottawa, **Patricia Burhunduli** University of Ottawa, **Ike Okafor** University of Toronto

Background/Purpose: Canadian medical schools host interviews as part of the application process, assessing candidacy for matriculation, and communication, ethical reasoning, and critical thinking skills. Underrepresented minority applicants often lack access to a network of individuals who can offer guidance and expertise in medical school interviews and ethical decision making. Minority applicants also tend to underperform on non-academic parameters of medical school applications.

Summary of innovation: University of Ottawa medical students designed a free multimodal (virtual and in-person) Interview Preparation and Support Program (IPSP) for underrepresented medical school applicants across Canada with support from the Community of Support. The virtual component was implemented to remain adherent to public health guidelines for the COVID-19 pandemic. The program included 23 applicants and 17 medical student volunteers. Medical students were paired with applicants and shared information about interview structures, conducted mock interviews, provided long-term peer-to-peer mentorship and networking, and shared approaches to answer ethical and traditional style questions. We aimed to increase diversity by helping minority applicants matriculate, improve confidence and self-perceived competency in ethical-decision making, reduce the anxiety and financial burden of purchasing interview preparation courses.

Conclusions: Pre and post-program surveys demonstrated significant improvements in the applicants' self-perceived: confidence in their competency to perform well and knowledge about interview structures, preparedness, and competency to answer ethical and traditional style questions, as well as reduced anxiety (all p<0.05). All applicants were relieved of the financial burden of purchasing interview preparation courses and 89% matriculated. IPSP addresses barriers faced by minority applicants and aims to increase equity, diversity, and inclusivity.

OD1-3-3-60034

Structural Distress: Experiences of Moral Distress related to Structural Stigma during the COVID-19 Pandemic

Javeed Sukhera Western University, **Chetana Kulkarni** University of Toronto, **Taryn Taylor** Western University

Background/Purpose: The COVID-19 pandemic has taken a significant toll on the health of structurally vulnerable patient populations as well as healthcare workers. The concepts of structural stigma and moral distress are important and interrelated, yet rarely explored or researched in medical education. Structural stigma refers to how discrimination towards certain groups is enacted through policy and practice. Moral distress describes the tension and conflict that health workers experience when they are unable to fulfil their duties due to circumstances outside of their control. In this study, the authors explored how resident physicians perceive moral distress in relation to structural stigma. An improved understanding of such experiences may provide insights into how to prepare future physicians to improve health equity.

Methods: Utilizing constructivist grounded theory methodology, 22 participants from across Canada including 17 resident physicians from diverse specialties and 5 faculty were recruited for semi-structured interviews from April to June 2020. Data were analyzed using constant comparative analysis.

Results: Results describe a distinctive form of moral distress called structural distress, which centers upon the experience of powerlessness leading resident physicians to go above and beyond the call of duty, potentially worsening their psychological well-being. Faculty play a buffering role in mitigating the impact of structural distress by role modeling vulnerability and involving residents in policy decisions.

Conclusions: These findings provide unique insights into teaching and learning about the care of structurally vulnerable populations and faculty's role related to resident advocacy and decision-making. The concept of structural distress may provide the foundation for future research into the intersection between resident well-being and training related to health equity.

OD1-3-4-60865

Strategies to support the well-being of learners in the health professions during the COVID-19 pandemic

Deborah Friedman McGill, **Camila Velez** McGill, **Emily Wasylenko** McGill

Background/Purpose: The COVID-19 pandemic presents significant challenges to universities and their learners and faculty. Many universities have suspended in-person activities and adopted remote teaching and services. Pandemic-related fear and uncertainty, as well as disruptions to learners' personal, academic, and clinical routines, can impact well-being. Universities are encouraged to prioritize and proactively foster learner' well-being through diverse means.

Summary of innovation: The WELL Office in the Faculty of Medicine and Health Sciences at McGill University has been responding to the needs of learners in the School of Physical and Occupational Therapy, Ingram School of Nursing, and School of Communication Sciences and Disorders. Since March 16, the WELL Office has been functioning remotely, ensuring learners remain connected to counselling services, and academic/clinical guidance and support. In April, a needs-assessment survey on the well-being of learners was conducted. Learners identified struggling with: fear, uncertainty, remote learning, completing academic and clinical requirements, isolation, relationships, and changes to future plans. In response, these interventions were implemented: (a) a webinar on strategies to cope with common stressors; (b) adapting the academic wellness curriculum to reflect the current reality; (c) the Assistant Dean, Student Affairs met with faculty, learners, and campus services to share learner concerns and foster improvements; (d) regular communications with learners trough website, newsletters, resource sharing; and (e) working with student representatives to assess and respond to concerns of different learner cohorts. A follow-up survey will be disseminated in mid-October.

Conclusions: The strategies implemented by the WELL Office have garnered positive feedback from learners and faculty. Reflections on strategies used, lessons learned, challenges and recommendations will be shared.

April 18th, 2021 - 16:30 EST
OD2 – 1 Professionalism

OD2-1-1-60698

Bringing the Patient Voice to Professionalism in Medical Education

Simon Haney University of Toronto, **Shiphra Ginsburg** University of Toronto, **Ayelet Kuper** University of Toronto, **Ryan Brydges** University of Toronto, **Paula Rowland** University of Toronto

Background/Purpose: Research has acknowledged the value of patients as an essential stakeholder group in education, yet medicine has failed to incorporate patients' perspectives into a discourse they are surely expert in: professionalism. Our purpose was to explore patients' perceptions of professional behaviour in medical learners as a first step to considering patients' potential roles in assessing professionalism.

Methods: Using a constructivist grounded theory approach we interviewed 19 patients, recruited from one urban hospital. Each participant watched 5 video scenarios that depict common professionally challenging situations faced by medical students. After each video, participants were asked what they thought the student should (or shouldn't) do in the scenario, along with their rationale.

Results: Participants' responses largely echoed those of medical students and faculty. They referenced principles of professionalism, the student's affect or internal factors, and potential implications of actions when discussing what they felt was correct behaviour. Patients conveyed an understanding of the multiple competing factors students must balance (e.g., providing optimal care while maximizing educational opportunities) and expressed empathy regarding some of the pressures students face. Participants also identified principles not previously raised by students or faculty, including the importance of respecting privacy and of not showing disagreement among professionals in front of a patient.

Conclusions: Knowing what patients perceive as important will allow educational and assessment efforts to be refined to reflect their values. Our work begins the process of understanding how best to include patients in the assessment of medical learners.

OD2-1-2-59994

Dual but dueling purposes: The use of reflective writing to remediate professionalism

Tracy Moniz Mount Saint Vincent University, Dalhousie University, **Carolyn Gaspar** Dalhousie University, **Andrew Warren** Dalhousie University, **Chris Watling** Western University

Background/Purpose: Underperformance in the professional role has high stakes for learners and educators. Problems with professionalism, unless appropriately and effectively remediated, may portend problems in practice. Yet, remediation is challenging. Increasingly, educators turn to reflective writing (RW) as a remediation strategy in residency, yet little is known about what educators expect RW to accomplish, how they choose tasks, why they use RW, or how they assess it. In this study, we aimed to understand how and why postgraduate medical educators use RW as an educational intervention to remediate professionalism.

Methods: We interviewed 13 medical education professionals with experience using RW to remediate professionalism across five Canadian medical schools. Data was analyzed iteratively for themes using constructivist grounded theory.

Results: Educators are using RW for dual purposes--as a learning tool to develop insight and as an assessment tool to unearth evidence of insight. The goal of learning may compete with the goal of assessment, creating tension that leads to uncertainty about the sincerity, quality and effectiveness of RW and concerns about learner safety. Educators are uncertain about whether learners write to perform or to reflect and about how to judge RW's effectiveness as a learning tool. Educators are concerned about creating a safe environment for learners--one that enables the genuine reflection required for insight development--while meeting requirements of the remediation process.

Conclusions: Educators often express ambivalence about using RW in remediation around professionalism in residency. Understanding the potential and pitfalls of RW may inform more tailored and effective approaches to professionalism remediation.

OD2-1-3-60894

Whose "Societal Needs": Exploring the Implicit Social Contract Between Medicine and Society

Brett Schrewe University of British Columbia, **Tina Martimianakis** University of Toronto, **Claudia Ruitenberg** University of British Columbia

Background/Purpose: The CanMEDS framework speaks frequently to the relationships between physicians and society. For example, within the text of the Professional Role, the former is positioned in service to the latter, and governed by an "implicit contract between society and the medical profession". Yet ambiguity around what this implicit social contract entails raises questions about which party decides what that service should look like and how medical faculties educate learners to provide it.

Methods: This work presents a critical discourse analysis of texts related to the CanMEDS framework, focusing on discourse around "society" and "societal needs." Its purpose is to shed light on how these documents frame the social contract "between society and the medical profession."

Results: Findings suggest that medical education leaders have interpreted the social contract in ways that speak for and about societal needs. While the Royal College's policies and frameworks do address the common good, its authoring of "society" is a key discursive technique by which self-regulation, autonomy, and privilege can be implicitly and strategically maintained.

Conclusions: These discursive practices may unintentionally constrict professional medicine's understandings of the myriad health care needs of the diverse Canadian society and its constitutive publics. Further, they may potentially undermine trust and accountability to that society and shape educational practices in ways that reproduce this asymmetric power relationship. If we are to educate physicians to work for the equitable realization of the social right to health care, we need consider alternative models that are democratically produced and created in a more egalitarian partnership with the society that medicine is to serve.

OD2-1-4-60788

Help! My patient is a jerk: Delivering exceptional patient care in the face of discrimination

Amr Hamour University of Toronto, **Anita Balakrishna** University of Toronto, **Yvonne Chan** University of Toronto

Background/Purpose: Learner mistreatment in medical education is a problem that transcends geography. Patients or patient's families remain the number one source of medical student and resident mistreatment. While there is increasing focus on addressing mistreatment within the medical circle, such as from attending physicians and allied health professionals, initiatives targeting learner mistreatment from patients are rare. Moreover, delivering exceptional care in the face of discrimination from patients presents an challenging problem for learners.

Summary of innovation: A mixed-methods approach was used to develop educational programming targeted to early clerkship third year medical students. First, a literature review was undertaken. Drawing from this, several stakeholder meetings were held in order to design educational content. Learners, faculty members, and administrative staff were involved in the creation of a small group one-hour session focused on equipping students with strategies to deal with situations of mistreatment from patients. Specifically, emphasis was placed on the goal of delivering excellent patient care towards potentially abusive and/or discriminatory patients. Roughly 90% of attendees found the workshop to be valuable. 100% of attendees indicated that they would recommend the workshop to a colleague. These figures were reproducible three months following the workshop in a follow-up survey.

Conclusions: Learner mistreatment from patients is often overlooked in medical education curricula. This initiative involving several stakeholders led to the development of a practical workshop aimed at equipping learners with strategies to navigate interactions with discriminatory patients.

OD2 – 2 Health & Wellness

OD2-2-2-60853

Moral Distress Among Practicing Canadian Critical Care Physicians: The Role of Moral Orientation

Dominique Piquette University of Toronto, **Peter Dodek** University of British Columbia, **Karen Burns** University of Toronto, **Franco Carnevale** McGill, **Aime Sarti** University of Ottawa, **Mika Hamilton** University of Toronto

Background/Purpose: Moral distress is defined as a cognitive-emotional dissonance experienced when being compelled to witness or deliver patient care that does not meet personal moral standards. Moral distress is an important and under-recognized problem among medical trainees and practicing physicians. Moral distress has direct negative consequences for patient care (e.g., decreased compassion), individuals (e.g., burnout), and the healthcare system (workforce attrition).

Methods: We conducted a qualitative, interview-based study of practicing critical care physicians. We purposefully selected a sub-group of physicians who had agreed to be contacted after completing a national survey on moral distress. Our objective was to enrich our understanding of moral distress experiences and relationships between professional interactions, context, and moral distress. Phone interview audio-recordings were transcribed verbatim and analyzed using an inductive thematic analysis. We used thematic saturation, researcher triangulation, and reflexivity to ensure rigor.

Results: We interviewed 20 critical care physicians. Moral orientation (how individuals usually perceive and resolve moral dilemmas), combined with legal, societal, clinical, and team contexts, contributed to moral distress. Participants commonly described three moral orientations: a justice orientation, a relationship orientation, and a non-committal orientation. We described how individual susceptibility to moral distress depended on moral orientation, how individuals learn to manage moral dilemmas over time, how different moral stances led to conflicts within team, and how communication within teams was as important as communication with families to reduce moral distress.

Conclusions: Moral orientation is a key aspect of moral distress. Certain moral orientations, as well as divergent moral orientations among colleagues, create internal and external conflicts, and may represent promising targets of educational interventions to reduce moral distress.

OD2-2-3-59668

Psychological Need Fulfilment Mediates Well-being in Medical Students: A Case for Shifting the Focus of Wellness Curricula

Adam Neufeld MD MSc University of Calgary, **Greg Malin MD PhD** University of Saskatchewan

Background/Purpose: During medical school, students' motivation and well-being stand to take a hit. While researchers continue to explore the utility of various wellness interventions to reduce student distress, studies have neglected to account for learners' basic psychological needs-autonomy, competence, and relatedness. From a Self-Determination Theory (SDT) perspective, these oversights are critical, because barriers and affordances to need satisfaction are ultimate sources of stress and obstacles to growth, resilience, and well-being. Our research explores how students' perceptions of autonomy, competence, and relatedness in medical school impact their intrinsic motivation and well-being, mindfulness, perceived stress, and ability to cope with stressors in the learning environment.

Methods: Medical students from our institution completed questionnaires related to the learning environment and aspects of their well-being. Mediation was used to assess the relationship between students' perceptions of the need-supportiveness of their instructors and learning environment in medical school and the aforementioned well-being indicators. Post-hoc tests were conducted to explore the contribution of each basic need and whether subgroup differences existed among our variables, by age, gender, and year of study in the MD program.

Results: Need fulfilment, more than resilience and mindfulness, related to students' perceived stress and mediated the relationship between students' mindfulness and coping. The more autonomy-supportive students perceived their learning climate, the greater their need satisfaction and psychological well-being. A range of subgroup differences existed in need fulfilment, stress, mindfulness, and coping.

Conclusions: Overall, results highlight psychological need fulfilment as a key mediator of students' ability to cope adaptively with stress, to be mindful and resilient, and to maintain their wellness during medical school. Findings have potentially important implications for teaching, curriculum, and wellness initiatives aimed at reducing medical student distress and improving their development and well-being.

OD2-2-4-60624

Resident and health profession student well-being: A novel promotive and hindering perspective on their thriving

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Background/Purpose: A majority of initiatives for trainee wellness have focussed on promoting positive well-being strategies as opposed to addressing systematic hindrances to thriving. This study uses Expectancy-Value-Cost motivation theory (Flake et al., 2015) to systematically identify the specific promotive factors and to investigate the hindrances to trainee well-being as a means of enabling a thoughtful response to them.

Methods: We surveyed health professions trainees about the promotive and the hindering factors for their thriving through a questionnaire on motives, supports, barriers, and experiences. Respondents included 128 residents, 130 medical, 78 nursing, 215 rehabilitation therapy, 124 public health sciences, and 183 biomedical sciences students from one Ontario Faculty of Health Sciences constituting response rates between 11-51%. We performed thematic and statistical analyses using Atlas.Ti v 8.0 and SPSS v25.0.

Results: Statistical and thematic results suggest, in the aggregate, residents and medical students have comparable levels of thriving-promotive factors that include engagement, positive experiences, and self-worth as their other health profession peers, but significantly lower comprehensive thriving as well as control over their lives while also having significantly higher perceived loneliness and negative feelings than their peers in other health science fields (MANOVA; p-values=<0.001, 99% confidence, medium/large effect sizes).

Conclusions: These results illustrate that are real and unaddressed hindrances to thriving that are not addressed by adding a wellness program to Health Professions Education. Addressing systematic hindrances like isolation, burnout, overworking, lacks of resources, negligent or unproductive supervision, and curricular overload should be the first changes before adding wellness curriculum.

OD2 – 3 Assessment & Feedback

OD2-3-1-60806

Assessment For Learning: A better understanding for a better implementation

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Background/Purpose: Researchers and educators often import concepts or approaches from educational and social sciences into health professions education (HPE). One example is "Assessment for Learning (AFL)" which is gaining popularity with the widespread implementation of Competency-based Medical Education. However, when importing a concept in a new discipline, there is always a risk of altering its conceptualization. Our aim was to document how AFL has been conceptualized and operationalized in HPE research and practice.

Methods: We conducted a scoping study informed by Arksey and O'Malley's methodology. Two team members screened all the abstracts and extracted numerical (e.g. year of publication, country) and qualitative data (e.g. AFL definition, conceptualization) based on a pre-defined set of extraction categories. Descriptive analyses were conducted for numerical data, and thematic analysis was conducted on qualitative data.

Results: The search strategy, applied to six databases, yielded 5239 articles. Only 123 articles met our inclusion criteria for full-text review, with 71 articles confounding AFL and formative assessment. Of the 52 remaining articles, most provided a definition of AFL (n=43), however, these definitions varied greatly across articles. Theoretical frameworks underpinning the use of AFL were present in only 15 articles.

Conclusions: Our results highlight a variety in conceptualizations of AFL. When we compare the broader literature on assessment in higher education, we realize that some elements of AFL may have been transformed during its operationalization. Consequently, operationalisations of AFL in HPE are greatly disparate and may not be sufficiently aligned with the original intended underpinnings to achieve its full potential.

OD2-3-2-60572

Perceptions of Assessment and Feedback: Relationships and Reconciliation

Kaif Pardhan University of Toronto, **Christopher Watling** Western University, **Linda Jones** University of Dundee

Background/Purpose: Supervisors in postgraduate medical education may deliver different assessments for the same quality of performance. Residents may struggle to make sense of inconsistent and sometimes contradictory information. We sought to explore how residents experience feedback from supervisors, how they process inconsistent information, and what factors influence their experiences.

Methods: Eighteen residents participated in semi-structured interviews to explore their perspectives on feedback. Data collection and analysis occurred iteratively, informed by constructivist grounded theory, and sample size was determined by theoretical sampling to sufficiency. Constant comparative analysis was used to identify and define themes.

Results: We identified a central theme of reconciliation, which we defined as the act of processing inconsistent feedback and determining how to engage with it. This reconciliation is informed by the credibility of, and residents' relationship with, supervisors and is achieved through conversation with others, observation of others' behaviour toward their performance, and reflection on their own performance. Residents' emotional responses and insight on the value of feedback for their own growth as professionals were important factors in feedback incorporation.

Conclusions: The findings of this study show that while residents are regular consumers of feedback, not all feedback is used equally. Residents actively reconcile incongruous feedback and its incorporation falls on a spectrum of outright dismissal to significant reflection and impacts on learning. This work reinforces the importance of pedagogical relationships where there are shared goals of educational outcomes, and development of supervisors as credible feedback providers.

OD2-3-3-60738

Multi-source feedback following simulated resuscitation scenarios: A qualitative study

Timothy Chaplin Queen's University, **Heather Braund** Queen's University, **Adam Szulewski** Queen's University, **Nancy Dalgarno** Queen's University, **Rylan Egan** Queen's University, **Brent Thoma** University of Saskatchewan

Background/Purpose: The direct observation and assessment of resuscitations in the clinical environment is difficult for attending physicians due to their unpredictable and time-sensitive nature. It is unclear how the assessments of allied health professionals and resident peers, who often attend resuscitations, compare to those of attendings. Soliciting multisource feedback (MSF) may improve the quality of feedback. We explored MSF during a longitudinal simulation-based curriculum with the goal of characterizing its role in the competency-based assessment of resuscitation.

Methods: This qualitative study included medical residents in their first postgraduate year who participated in a simulation-based resuscitation course during the 2017-2018 academic year at two Canadian institutions. Assessments included an entrustment score and narrative comments from attendings, registered nurses, and peers in addition to a self-assessment. Narrative comments were thematically analyzed overall and within assessor groups.

Results: Sixty residents from 14 medical specialties participated. 223 assessments were completed and analyzed. Four themes emerged: 1) Communication, 2) Leadership, 3) Demeanor, and 4) Medical Expert. Relative to other assessor groups, feedback from nurses focused on patient-centered care and team communication while attendings focused on the medical expert theme. Peer feedback was the most positive. Self-assessment comments addressed all emergent themes.

Conclusions: In the context of a simulation-based resuscitation curriculum, feedback from different sources had varied areas of focus. Therefore, while feedback from peers and allied health professionals cannot replace the feedback of attending physicians, MSF may provide a more holistic reflection of resident performance.

OD2-3-4-60664

Defining the skills needed to perform advanced laparoscopic suturing in simulation: a qualitative descriptive study

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Background/Purpose: Advanced laparoscopic suturing (ALS) remains a challenge to trainees. Formative feedback should be meaningful and measurable to direct training and monitor progress. In this study, we identified themes that would be important to focus on for formative feedback when assessing 2 advanced laparoscopic suturing tasks.

Methods: Experienced MIS surgeons at McGill and University of Toronto(UofT) performed 2 ALS tasks using Endo StitchTM device: suturing under tension(UT) and continuous suturing(CS). After, they were shown an edited video of a novice performing the tasks and were asked to comment on the performance and key technical skills needed to perform each task. Interviews were transcribed, and inductive thematic content analysis was conducted.

Results: 11 MIS surgeons(5 UofT, 6 McGill) participated. Previously, seven key principles were identified and used to structure the feedback: depth perception, laparoscopic safety, bimanual dexterity, exposure, tissue handling, instrument manipulation, and planning. For both tasks, emerging themes were: leaving appropriate length of the suture tail, knowing how to use the suturing device, using non-dominant hand as a post, coordinating both hands, taking bites in the right orientation, tying the knot securely, maintaining appropriate tension, and keeping target tissue steady.

Conclusions: This study identified formative feedback themes for 2 device-assisted laparoscopic suturing tasks. These themes will be useful for formative feedback and assessment as part of an advanced laparoscopic suturing curriculum. These themes could be used to develop a formative feedback tool.

April 19th, 2021 - 10:00 EST

OE1 – 1 Faculty Development

OE1-1-1-60709

Employing a coach-approach in faculty development through in-person and virtual group coaching

Ingrid Price University of British Columbia, **Heather Buckley** University of British Columbia **Linlea Armstrong** University of British Columbia, **Maria Hubinette** University of British Columbia

Background/Purpose: Within the UBC MD curriculum, faculty provide group coaching as part of a longitudinal portfolio that supports self-assessment, self-regulated learning and professional identity formation through exploring patient-care interactions in a safe, social space. However, not all faculty have training or experience with coaching nor skills needed to support identity formation and maximize peer-peer learning. Further, faculty were requesting more opportunities to connect with and learn from each other. Thus, we identified two faculty development needs: to support development of novel group coaching skills while building community among a professionally heterogeneous and geographically dispersed faculty.

Summary of innovation: A coach approach was used to flexibly deliver the program and model a set of skills that embodied core principles of portfolio: personally relevant, goal-directed and identity (coach) focussed. This allowed participants to experience the application of group coaching and support the development of their coaching skills. Further, by employing a group coaching model, sessions were designed to take advantage of participant experience and expertise in order to build connection and community.

Conclusions: Participants found connection to each other, credibility of the facilitator as a coach and portfolio coach, and modelling group coaching to be of most value. Faculty developers observed that small coaching group sessions appeared to foster a deep, ongoing and guided conversation regarding the portfolio coach role, allowing participants to link this to their own coaching skills and challenges. Further, while the flexibility of virtual group coaching sessions created a supportive space for geographically dispersed coaches, potential technological barriers need attention and mitigation.

OE1-1-2-60289

Learner driven faculty development

James Goertzen Northern Ontario School of Medicine, **Clare Cook** Northern Ontario School of Medicine

Background/Purpose: Medical education experts suggest learner evaluations often do not significantly change faculty's teaching. Providing faculty development to distributed preceptors can be challenging. This project links concepts from quality improvement, communities of practice, and reflection on education practice to assess the impact of a workshop using learner evaluations to stimulate teaching improvements.

Methods: A faculty development workshop based on grouped, anonymized evaluations was offered to Northern Ontario Local Education Groups (LEGs). LEGs are key to delivering undergraduate and postgraduate educational activities at NOSM and function as communities of practice. Participants reviewed strengths and areas for improvement; discussed individual and group-based improvement strategies; and completed intention to change declarations. Follow-up surveys and interviews assessed impact.

Results: Eleven workshops with LEG membership of 291 representing 25% of NOSM's clinical faculty participated, including rural and urban LEGs; small and large LEGs; family medicine and specialty LEGs. Common themes such as improving learning orientation and providing regular feedback emerged across multiple LEGs. Weaknesses unique to specific LEGs were also identified including appropriate response to learners' negative experiences and how to manage patients with learners. Outcomes include individual faculty changes (e.g. eliciting feedback; clarifying learning objectives) and LEG-based changes (e.g. new tools, processes, assessments). Faculty responded positively and report increased awareness of their LEG as a Community of Practice.

Conclusions: Learner evaluations provide opportunities to engage faculty individually and within a community of practice to implement meaningful improvements to their teaching practices.

OE1-1-3-60050

Exploring the Role of Social Networks in Supporting Faculty Development

Heather Ncole Buckley University of British Columbia, **Laura Nimmon** Universityof British Columbia

Background/Purpose: Faculty development is increasingly important in health professions education. Faculty developments' conceptualization has evolved from an individual skills training activity to more contemporary notions of an organizational model. This organizational model recognizes relationships and networks as increasingly important mediators of knowledge mobilization. Although these conceptual advancements are critical, we lack empirical evidence and therefore robust insights into how networks shape processes of learning in faculty development. To fill this gap the following research question was explored: How do the professional social networks of faculty shape their learning about teaching?

Methods: This study used a qualitative social network approach to explore how teaching faculty's relationships influenced their learning about teaching. The study was conducted in an undergraduate course at a Canadian medical school. Eleven faculty participants were recruited and 3 methods of data collection were employed; semi-structured interviews, participant drawn sociograms, and demographic questionnaires.

Results: Results showed that the networks of faculty participants influenced their learning about teaching in the following four areas: knowledge acquisition and mobilization, identity formation, vulnerable expression (intellectual candour), and scaffolding.

Conclusions: Our insights illuminate how social factors may influence faculty's learning about teaching. The findings support the recent calls to re-orient faculty development in the health professions as a dynamic social enterprise. We propose that faculty developers should consider faculty's social embeddedness in their professional social networks to strategically enhance and optimize faculty learning.

OE1-1-4-60637

Building a Faculty Development Resource across the Medical Education Continuum to Rapidly Adapt Teaching and Learning for the Virtual Environment

Latika Nirula University of Toronto, **Jana Lazor** University of Toronto, **Lindsay Baker** University of Toronto, **Susan Glover Takahashi** University of Toronto, **Susanna Talarico** University of Toronto, **Suzan Schneeweiss** University of Toronto, **Heather MacNeill** University of Toronto

Background/Purpose: The COVID-19 pandemic has shifted our learning environments online, leaving many faculty, learners and organizations unprepared for the new realities of education. We describe an innovative approach to creating a faculty development (FD) resource to support equitable, inclusive, and engaging virtual learning environments. Identifying nuanced considerations around how structures, processes and people align within contexts along the medical education continuum is key.

Summary of innovation: A collaborative of individuals across the medical education continuum (undergraduate, post-graduate, continuing professional development, faculty development) came together to engage in an innovative and integrative approach to developing a FD resource with broad applicability across a variety of environments. Drawing from evidence-informed learning-centered pedagogical principles and also purposely attending to the principles of equity and universal learning design, an e-resource was developed which provides guidance for faculty and learners embarking on teaching and learning within online synchronous environments. Six key areas of consideration were identified (accessibility, equity/inclusivity, collaboration, learner engagement, educational context, privacy/security/copyright) with links to practical resources to assist with application and implementation. We describe the iterative and collaborative process of developing this FD resource, and evaluating its efficacy and impact across the medical learner continuum.

Conclusions: This integrated approach reduces duplicative efforts, minimizes confusion for those needing "just in time" support, and promotes consistency across learning contexts within a Faculty of Medicine. While the impetus for the e-resource was in response to the pivot to virtual learning, we hope this integrated model for FD resource creation can be applied to other priority faculty development areas in the future.

OE1 – 2 Assessment OSCE

OE1-2-1-60500

Formative Learner Assessment in the Time of COVID-19: Implementing a Pediatric Postgraduate VOSCE

Jason Silverman University of Alberta, **Jessica Foulds** University of Alberta

Background/Purpose: Traditional objective standardized clinical examinations (OSCEs) are not possible in the context of COVID-19 physical distancing guidelines and group gathering limitations. Program directors have been forced to delay, cancel, or find alternatives to these assessments. In response we developed and assessed the implementation of virtual OSCEs (VOSCEs).

Summary of innovation: We modified OSCEs from two pediatric training programs to run virtually using video communication software (Zoom) . We surveyed all participants on their experience and baseline comfort with technology based on the Technology Acceptance Model. Administrators documented the frequency and reason for deviations from planned procedures. Survey response rates were high across all participant groups (34/39, 87%). Most trainees (10/18, 56%), examiners (9/11, 82%) and program staff (5/5, 100%) were positive or very positive toward VOSCEs. Participation in, or administering, the VOSCE was rated as easy or very easy by 44% of learners, 64% of examiners and 100% of administrators. Most procedure deviations (5/6, 83%) were technology-related issues that were easily addressed. Years of experience did not significantly influence responses for either administrators or examiners.

Conclusions: The development and implementation of a pediatric VOSCE required creative methods for replicating a traditional OSCE experience, increased time for participant instructions, and scheduling flexibility during administration to manage technology-related deviations from procedure. Despite these potential barriers, our work clearly showed that VOSCEs are a feasible and acceptable method allowing for continued formative learner assessment in the context of restrictions preventing traditional OSCE administration.

OE1-2-2-60302

The OSCE date: A movie and dancing.

Jinelle Ramlackhansingh Memorial – University of Newfoundland, **Fern Brunger** Memorial – University of Newfoundland

Background/Purpose: Students do Objective Structured Clinical Examinations (OSCEs) to assess clinical skills in preparation for ward work. The students are taught examination and are observed in formative and summative assessments. Critics of OSCEs argue that students "perform" rather than practicing patient-centered care.

Methods: This work was part of a larger study examining professional identity development in pre-clinical medical students. Focus groups were carried out over two years with groups of pre-clinical students. Transcripts were critically analyzed and themes developed.

Results: The students described the social choreography of the OSCE as they performed clinical skills. The students likened the performance to the Disney movie "Monsters Inc.". Like the scary monsters, who apprehensively wait outside the children's doors, the students nervously waited outside the standardized patient's door. The monsters are rated on their ability to scare children, while the students are assessed on their clinical skills. The monsters wait for a bell to go inside the room, as the students wait for the buzzer to enter the patient's room. The students spoke about a "backstage area" where they wait, read the scenario, and decide their actions. This area was a liminal space where the students prepared themselves for what they describe as their "performance".

Conclusions: These findings add support to concerns that OSCEs may not truly assess the ability to apply clinical skills in the complex environment of patient care. The "performance" of clinical skills through OSCE may result in hidden incompetence. The presentation concludes by proposing an alternate model of "in-situ" clinical skills assessment.

OE1-2-3-60695

Exploring communication skills when introducing an EMR in an OSCE

K. Jean Chen University of Ottawa, **Ilona Bartman** Medical Council of Canada, **David Topps** University of Calgary, **K. Jean Chen** University of Ottawa, **Doug Archibald** University of Ottawa, **Isabelle Desjardins** University of Ottawa, **Melissa Forgie** University of Ottawa, **Debra Pugh** Medical Council of Canada

Background/Purpose: Despite efforts to introduce electronic medical records (EMRs) into learning, there is little literature related to the assessment of EMR-related competencies. To address this gap, this study explored EMRs' impact on medical student-patient communication.

Methods: Communication skills with the introduction of EMR use were explored during an objective structured clinical examination (OSCE) administered to 99 third-year students. An EMR pilot station was developed, built in OpenLabyrinth and designed to emulate MedAccess©, to gather information needed to counsel a Standardised Patient (SP). Students' communication skills were assessed by SPs and physician examiners (PEs) using checklists and ratings scales. EMR station characteristics, including item total correlation (ITC) and difficulty were analyzed and compared to overall OSCE performance.

Results: Compared to the other 9 OSCE stations, the EMR station had the second lowest mean, lowest pass rate, and largest standard deviation based on PE scoring. It had an acceptable ITC (.217). Pearson correlations between PE and SP rating scales ranged from non-significant (0.081) (Listening) to moderately significant (0.433) (Information Giving). The skills around EMR use discriminated among students, with higher overall scores awarded by SPs and higher Listening and Adherence Optimization scores awarded by PEs.

Conclusions: While the students performed poorer in the EMR station, it had acceptable psychometric characteristics. Students' ability to use EMR, measured from the SP's and PE's perspectives, correlated with communication skills. There is a difference between how physicians and patients interpret communication skills when the student uses and EMR and is an area of potential future research.

OE1 – 3 Simulation

OE1-3-1-60518

Needs Assessment Study to Build Interprofessional In situ Simulation Training in Non-technical Skills: Improving Quality of Care and Patient Safety During Acute Clinical Adverse Events.

Ahmed Moussa Université de Montréal, **Claude-Julie Bourque** Université de Montréal, **Nathalie Loye** Université de Montréal, **Audrey Larone Juneau** Université de Montréal, **Michael-Andrew Assaad** Université de Montréal, **Evelyne Wassef** Université de Montréal, **Marta Martisella** Université de Montréal

Background/Purpose: Healthcare providers (HCP) must master technical and non-technical skills (NTS) necessary to ensure patient safety and favourable outcomes. In situ simulation (ISS) possibly improves teamwork and team satisfaction, however evidence describing the effect of ISS on HCP NTS is not well described. We aimed to conduct a needs assessment to identify knowledge and competency gaps regarding NTS of HCP during acute events.

Methods: HCP in a level 3 NICU completed a questionnaire: 1) Open-ended comments on key concepts; 2) Needs assessment based on their past experiences in acute events; 3) Perceptions of past team performance and latent safety threats (LST) during critical events; 4) Perception of quality of interactions with other professionals during emergency interventions, open-ended questions about expectations in terms of training and barriers to participating in simulation training; 5) Demographics.

Results: 125 HCP responded (40% response). Crisis resource management and specific NTS (communication with families during events, teamwork and controlling stress) were identified as training needs. At least 50% of respondents state that during critical events 1) they feel anxious, 2) have the impression that a leader is never identified, 3) leaders do not coordinate communication between team members, 4) team members do not repeat or feedback information to ensure comprehension in the team. Two thirds of respondents identify lack of transfer of information as the main LST during acute events.

Conclusions: Competency gaps of HCP are related to NTS and specifically leadership, communication and stress management, which are essential to ensure patient safety and favorable outcomes. Upcoming ISS curriculum will include these concepts and will measure its effect on HCP behaviors and institution culture change.

OE1-3-2-59923

Online Simulation Curriculum to Prepare Interdisciplinary Medical Teams for Electronic Dance Music Festivals

Anthony Seto University of Calgary, **Allen Vorobeichik** University of Calgary, **Logan Haynes** University of Calgary, **Abraham Hussein** University of Calgary, **William Kennedy** University of Saskatchewan, **Logan Haynes** University of Calgary

Background/Purpose: Patient care in Electronic Dance Music (EDM) festivals presents unique challenges, including resource limitations, loud music, crowdedness, and working in ad hoc teams. We developed an online program to prepare medical teams to assess and manage life-threatening cases uncommon to most practices.

Summary of innovation: Teams of 4-5 healthcare providers/trainees participated in 3 online simulations (cardiac arrest, serotonin toxicity, and toxin-induced seizure). A facilitator managed case progression through a Zoom screen-share of Google Forms. Participants completed self-efficacy and knowledge assessments 1 week pre- and post-session, as well as surveys immediately post-session, reflecting on teamwork, take-home learning points, and program quality.

Conclusions: Average self-efficacy ratings (n=18) increased pre- vs. post-session (one-tail repeated-measures t-test) for cardiac arrest (3.80 to 4.31/5.00; $p<0.01$), serotonin toxicity (2.60 to 4.13/5.00; $p<0.001$), and seizure (2.70 to 3.83/5.00; $p<0.001$). Average knowledge (n=18) increased pre- vs. post-session (one-tail repeated-measures t-test) for all cases ($p<0.001$): cardiac arrest (67% to 80%), serotonin toxicity (65% to 83%), and seizure (54% to 76%). Participants reported collaborative decision-making and communication as teamwork strengths. Commonly reported learning points were related to pharmacology/toxicology, clinical approaches, and differential diagnoses. Average program satisfaction rating (n=22) was 4.36/5.00. Online simulation has several benefits: i) serves as an icebreaker for teams prior to arriving at events, ii) eliminates physical distractions (e.g. loud music) to focus on clinical knowledge and approaches, and iii) offers convenience and cost-savings.

OE1-3-3-60818

"She's a manikin; she won't mind": A sociomaterial look at patient centredness in manikin-based simulation

Paula Cameron Dalhousie University, **Molly Fredeen** Dalhousie University, **Anna MacLeod** Dalhousie University, **Rola Ajjawi** Dalhousie University, **Jonathan Tummons** , **Olga Kits** Dalhousie University, **Victoria Luong** Dalhousie University, **Marti Cleveland-Innes**

Background/Purpose: Medical educators increasingly prioritize Patient Centred Care (PCC), and have identified simulation as a promising area for preclinical PCC practice. However, due to the traditional separation of "hard" and "soft" skills in medical curricula, patient centredness is often associated with simulated patients and overlooked in clinical skill sessions with manikins. Manikins are often assumed to be "human enough" for skill practice but their influence on teaching and learning PCC can be overlooked. We therefore sought to understand (1) how manikins shape teaching and learning in undergraduate medical simulation, and (2) implications for PCC.

Methods: Informed by a broader body of data, this presentation offers a sociomaterial analysis of a third-year pre-clerkship simulation that combined six clinical skills within one overarching case. Two sets of student and instructor pairs were each assigned to a male-presenting medium fidelity manikin overlaid with an IV arm, phlebotomy trainer, and injection pad. Our ethnographic methods included video observations (n=240 minutes), curriculum analysis (n=8), and interviews (n=11).

Results: Human-manikin interactions both affirmed and undermined PCC. Affirming actions included teachers voicing patient concerns and directing students to seek consent; and students offering the patient procedural choices. Undermining elements included lack of student-patient communication; leaning on the manikin; centering teacher approval and expertise; and caricaturing the patient as stereotypically feminine.

Conclusions: Patient centredness is both affirmed and undermined in manikin-based simulation. The material form of the manikin complicates PC teaching and learning. Intentionally planning for this complexity may ensure more consistent adherence to patient centred principles.

April 19th, 2021 - 11:00 EST
OE2 – 1 Curriculum

OE2-1-1, 60733

Resident satisfaction and practice exposure in horizontal vs block family medicine curricula - a Canadian perspective

Miriam Lacasse Université Laval, **Jean-Sébastien Renaud** Université Laval, **Batya Grundland** University of Toronto, **Maria Hubinette** University of British Columbia **Fok-Han Leung** University of Toronto, **Theresa van Der Goes** University of British Columbia

Background/Purpose: The family medicine (FM) horizontal (longitudinal) residency curriculum is a model of training thought to better align with actual practice. The FM clinic is the core setting with integrated specialty rotations throughout the majority of training. Few studies have rigorously documented outcomes of the horizontal curriculum model. This study aimed to compare resident satisfaction and practice exposure in horizontal and traditional block curricula.

Methods: This curriculum structure evaluation used a retrospective semi-experimental study design based on CFPC FM Longitudinal Survey data from 3 Canadian FM programs. Data from 2014 to 2019 resident cohorts were categorized by horizontal or block curricula. We used Kirkpatrick's taxonomy to assess satisfaction (level 1, 13 items, α=.87) and domains of clinical care exposure (level 3) during residency. Associations between curriculum structure and scores on satisfaction and exposure (5-point Likert scales) were tested using one-way ANOVAs.

Results: We analyzed data from 1853 residents (block: nT1;T2=670;740, horizontal: nT1;T2=186;256) from 46 teaching sites. The horizontal curriculum was associated with slightly higher satisfaction (4.34 vs 4.25, p=0.02) and more exposure to home care (2.80 vs 2.52, p<.0001) and chronic diseases (3.00 vs 2.97, p=.02). Block curricula were associated with higher exposure to vulnerable populations (2.66 vs 2.47, p<.0001) and First Nations/Inuit/Metis (2.31 vs 2.10, p=.0002). Exposure to intrapartum care, emergency medicine, in-hospital practice, mental health, long-term care and palliative care was not significantly different.

Conclusions: Resident satisfaction appears to be slightly higher in horizontal curricula, which offers similar exposure to block curricula for most domains of clinical care.

OE2-1-2, 60546

Exercise Prescription Curriculum Re-design in the UBC Faculty of Medicine

Arielle Roberts University of British Columbia, **Catherine Gaul** School of Exercise Science, Physical & Health Education, University of Victoria, **Ron Wilson** University of British Columbia

Background/Purpose: Canadians are insufficiently active, leading to an increased risk of premature mortality and over 35 chronic health conditions. Exercise prescription increases physical activity and creates significant health benefits, but few Canadian physicians use this tool. A lack of knowledge or training was the second most common barrier to its use cited by physicians, and UBC Medicine students have described themselves as not prepared to prescribe exercise, which perpetuates this lack of use.

Summary of innovation: We reviewed relevant literature to determine best practice content and teaching methods, which were used to develop an exercise prescription spiral within the UBC Medicine curriculum. By revising and expanding existing case-based sessions across all disciplines in 11/56 (19.6%) of pre-clinical weeks, we were able to deliver a comprehensive exercise prescription curriculum with no additional curricular time or resources required. The principles of exercise prescription were introduced, reviewed and integrated with the prevention and management of chronic conditions across the lifespan. The principles of behaviour change were included as a foundation for the use of exercise prescription in clinical practice.

Conclusions: Initial informal student and facilitator feedback was positive and indicated a desire for wider integration of exercise prescription content and further condition-specific recommendations, which will be goals of future projects. Our approach to integration proved a good solution to adding content to a full curriculum and was supported by faculty leadership. This worked well for UBC Medicine's spiral curriculum, as small amounts of content could be reviewed and built upon in later sessions but may require alternative solutions in different curricular models.

OE2-1-3, 60529

Comment former le médecin de famille de 2035 ? Étude prospective

Yves Delair Université de Montréal, **Diane Robert** Université de Montréal, **Nicolas Fernandez** Université de Montréal, **Nathalie Caire Fon** Université de Montréal, **Alain Papineau** Université de Montréal, **Lyne Ménard** Université de Montréal, **Riendeau Tania** Université de Montréal, **Marie-Claude Lussier** Université de Montréal, **Codsi Marie-Pierre** Université de Montréal, **Barbara Fillion** Université de Montréal

Contexte : L'évolution des besoins de santé des populations exerce une pression pour transformer la pratique de la médecine de famille et la pédagogie médicale. L'université doit préparer les résidents actuels à répondre aux besoins de leurs patients du futur. Le Conseil pédagogique (CP) des programmes de médecine familiale de l'Université de Montréal a entrepris une réflexion collective pour déterminer les adaptations nécessaires visant à former à la relève. Objectifs : identifier les enjeux centraux de la pratique de la médecine de famille de 2035 qui doivent être intégrés dès aujourd'hui à la formation des résidents.

Méthode : Les travaux ont débuté en juin 2019 par une recension des écrits portant sur l'avenir de la médecine de famille. Ensuite, avec l'appui de spécialistes en planification stratégique nous avons conçu une démarche innovatrice de prospective. Nous avons invité les responsables de l'enseignement clinique dans les 18 unités de médecine de famille affiliées à une retraite afin de valider et enrichir notre portrait de l'avenir. Les participants ont complété - en équipe - l'agenda d'une semaine de travail en 2035 d'un clinicien-enseignant. Parallèlement, un groupe de patients partenaires s'est constitué pour contribuer à la réflexion.

Résultats : Les enjeux qui ont émergé portent sur les pratiques pédagogiques qui sont en changement. En ce sens, les contenus à enseigner et à évaluer sont appelés à évoluer, faisant appel davantage à la technologie. Par ailleurs, la collaboration avec les patients, les collègues et les professionnels des autres disciplines devra aussi occuper une place importante. Finalement, la responsabilité sociale devra être tissée de manière plus serrée à l'intérieur des activités d'enseignement et d'évaluation pour ne jamais perdre de vue la santé des patients, de leurs familles et leurs communautés.

Conclusion : Les priorités identifiées par les responsables de l'enseignement nous permettront, lors d'une retraite en 2021 d'initier les travaux d'adaptation du programme de formation.

OE2-1-4, 60307

Evaluating a pen-pal curriculum innovation: A novel medical education tool to teach medical students compassion for homelessness

Jackie Tsang University of Toronto, **Abirami Kirubarajan** University of Toronto, **Seiwon Park** University of Toronto, **Roxanne Wright** University of Toronto, **Heather Dirckze** University of Toronto, **Ivona Berger** University of Toronto, **Fok-Han Leung** University of Toronto

Background/Purpose: Despite homelessness being one of the most powerful social determinants of health, it remains difficult to teach empathy for this population to pre-clerkship medical students. Current homelessness health curriculum is limited and can portray negative stigmas of homelessness. This study evaluates a pilot pen-pal curriculum innovation that aimed to facilitate compassion through letter exchanges, where medical students were paired with community members with lived experiences of homelessness and mental illness.

Methods: By using a grounded theory approach, the researchers explored pre-clerkship medical students' experience in this four-week pilot project. In-depth, semi-structured interviews with medical student participants were conducted by telephone. These were recorded, transcribed, and coded using deductive and inductive coding by two independent coders. Codes were analyzed within code groups for themes, supported by group discussion and analytic memos.

Results: Out of 11 students in the pilot project, 10 consented to partake in this study. Four key themes emerged in the thematic analysis: 1) Evaluation of Experience, 2) Personal Connection with a Community Member, 3) Skill Development, and 4) Implementation into Medical Education Curriculum.

Conclusions: Medical students' sentiments about their experience were overwhelmingly positive and were frequently attributed to developing a genuine and mutually beneficial friendship with a community member through the letter exchange. In addition, students highlighted the utility of the pen-pal project in facilitating improved communication, advocacy, and empathy skills. Lastly, despite the perceived importance of homelessness education, all students that were interviewed felt the University of Toronto's pre-clerkship curriculum is lacking in this area.

OE2 – 2 Equity

OE2-2-1, 60224

Communication skills: Going beyond eye contact

Samantha Stasiuk University of British Columbia, **Sara Shahram** University of British Columbia, **Heather Buckley** University of British Columbia, **Maria Hubinette** University of British Columbia

Background/Purpose: Traditional medical education communication curricula typically focus on the fundamental tasks of communication (lean in, have an open posture, make eye contact, etc.). There are several established frameworks, such as the Kalamazoo consensus statement, that describe "essential" elements in physician-patient communication. However, many of these frameworks only briefly and superficially elude to broader concepts such as patient centered care or cultural humility. While the mechanics of communication are necessary, we argue that focusing on these process tasks is not sufficient for a holistic communication skills curriculum.

Summary of innovation: The first year Communication Skills program at UBC was redesigned recognizing that equity concepts can play more of a role in achieving effective communication than conversational mechanics could ever accomplish. The goal was to move beyond the "how" methodology of communication frameworks into a more reflective space that acknowledges and empowers patients. Theoretical concepts highlighting intersectionality and trauma informed care were woven through the existing 8-week suite; time was designated within each weekly small group session to discuss pre-assigned articles in a "journal club" format. The aim in highlighting these concepts foundationally allows learners to link the ideas covered to their experiences in patient care going forwards and enact social change.

Conclusions: Tutors and students alike received the new curriculum with positivity and interest. Operationalizing social accountability within a curricula proves difficult to move from theory to practice. This integration into communication skills is one proposed method. We want to cultivate young physicians to become those who practice with thoughtful perspectives that address social determinants of health.

OE2-2-2, 60579

Diversifying the Health and Human Service Professions: Indigenous Perspectives

Emilie Nevill University of British Columbia, **Kirsten Joy Correll** University of British Columbia, **Hali McLennan** University of British Columbia, **Hailey Matheson** University of British Columbia **Ashley Quinn** University of Toronto, **Yael Mayer** University of British Columbia, **Tal Jarus** University of British Columbia

Introduction: Indigenous peoples make up 5% of Canadian population, however, only 3% of health care professionals identify as Indigenous. As various studies have reported the benefits of diversifying the health professions, the barriers and facilitators of increasing the number of Indigenous peoples in these professions must be identified. Objectives: In response to the Truth and Reconciliation Commission of Canada's Calls to Action, the purpose of this project is to identify and understand the barriers and facilitators Indigenous peoples face in occupations related to achieving and maintaining a position in health and human service professions.

Methods: A narrative approach was used to collect perspectives based on individual experiences through facilitation of sharing circles with Indigenous students, staff, and clinical and academic faculty. Thematic analysis was used to reveal themes regarding participant experiences and the impact of those experiences on participation in study and career-related occupations.

Results: Results from this study identified current academic structures and ideologies rooted in colonialism, that act as barriers for engagement and inclusion of Indigenous students, staff, and clinical and academic faculty. Our main themes identified include negotiation of identity in different spaces, negotiating colonial structures in health and human service professions, and negotiating changes and transitions in health and human service professions.

Conclusions: We anticipate these results will act as a catalyst for uncovering further changes to be made regarding attitudes, procedures, and practices present in an academic environment that limit the inclusion of Indigenous peoples in health and human service professions.

OE2-2-3, 60730

The Diversity Mentorship Program: a model for effective equity-based mentorship

Imaan Javeed University of Toronto, **Anita Balakrishna** University of Toronto

Background/Purpose: Effective mentorship is a contributing factor to academic and workplace success in medicine, yet medical trainees from underrepresented / minoritized groups in medicine (UMGMs) often struggle to find mentors who are from similar social backgrounds. There is a lack of research on equity-based mentorship programs for UMGMs, especially in the Canadian context. To help address these gaps, the University of Toronto Diversity Mentorship Program (DMP) pairs 1st and 2nd year UMGM mentees with staff mentors who ideally share a similar social identity to foster equity-based mentoring relationships.

Summary of innovation: In 2018-2019, the DMP facilitated 52 mentor-mentee matches, forming pairs that were to meet throughout the academic year. We also offered structured events centered around the theme of equity-based mentorship, creating additional opportunities for learning and networking. The DMP centers around three main objectives: fostering identity development, strengthening community, and empowering excellence. We distributed an online survey to DMP mentors (response rate: 56%) and mentees (response rate: 44%) to learn more about their experiences, assess goal achievement, and highlight the DMP's strengths and weaknesses.

Conclusions: High proportions (>85%) of mentors and mentees felt they had productive mentoring relationships. Four in five mentors (79%) also found the DMP to be personally rewarding. The DMP provides a framework for an effective mentorship program for medical students belonging to UMGMs. Our data highlights activities, discussion topics, and techniques used by mentor-mentee pairs, showing that many goals of the program were achieved. We are continually enhancing the program based on feedback to better achieve objectives.

OE2-2-4, 60811

"Head of the Class": Equity policies, practices and discourses related to Department Head appointments at a Canadian medical school

Paula Cameron Dalhousie University, **Christy Simpson** Dalhousie University, **Shawna O'Hearn** Dalhousie University, **Roger McLeod** Dalhousie University, **Anne Mahalik** Dalhousie University, **Constance LeBlanc** Dalhousie University, **Anna MacLeod** Dalhousie University

Background/Purpose: Academic medicine leaders play a crucial role in medical education, research and practice. A Department Head (DH), for example, is "head of the class"-both figurehead and decision-maker. People in this role regularly influence the medical education continuum, thereby impacting future researchers, medical educators, and clinicians. DHs are crucial change-makers and have a visible (and expected) role in supporting new policies and initiatives within their Departments and Faculty. Who these leaders are therefore matters. However, diversity amongst DHs remains a key challenge for medical schools. We require a better understanding of barriers and enablers to equitable leadership appointments, particularly here in Canada.

Methods: We conducted a critical discourse analysis (CDA) to examine underlying assumptions shaping EDI policies and DH appointments in one Atlantic Canadian medical school from 2005-2020. We conducted 1. document analysis of equity policies and HR documents, and 2. interviews with successful DHs and hiring committee chairs, looking for implicit values and assumptions relating to equity and academic medicine leadership.

Results: We identified several discourses relating to equity and DH appointments, framing equity as: 1. documentation; 2. redressing injustice; 3. relinquishing privilege; 4. legal obligation; 5. moral commitment; and 6. aspiration. Normative assumptions related to "good leadership" appeared to remain abstract and unchallenged, while the accomplishment of equity was often equated with the existence of equity policies themselves. Legal obligations were often presented as hopes and intentions, with formal accountability and evaluation of equity remaining largely invisible.

Conclusions: Underlying ideas about "good leadership" in academic medicine were largely unquestioned, with equity often perceived as starting and ending with formal recruitment policies. Deeper engagement with normative characteristics of leadership, and barriers beyond recruitment policies, offers rich potential for more

effectively achieving equity in academic medicine leadership.

OE2 − 3 CBME

OE2-3-1, 60782

Spotting Potential Opportunities for Teachable moments (SPOT)

Spencer Sample McMaster University, **Hussein Al-Rimawi** McMaster University, **Teresa Chan** McMaster University

Background/Purpose: With competency based medical education (CBME), entrustable professional activities (EPAs) are used to evaluate residents on performed clinical duties. This study aimed to determine if implementing a case-based discussion, designed to increase recognition of available EPAs, into CBME orientation would help residents increase the number of EPAs completed.

Methods: We designed an intervention consisting of clinical cases that were reviewed by national EPA experts who identified which EPAs could be assessed from each case. A case-based session was incorporated into the 2019 CBME orientation where Postgraduate Year (PGY)1 residents read the cases and discussed which EPAs could be obtained with PGY2/faculty facilitators. The number of EPAs completed in the first two blocks of PGY1 was determined from local program data. Student's t-test was used to compare averages between cohorts.

Results: We analyzed data from 22 trainees (7 in 2017, 8 in 2018, and 7 in 2019). In the first two blocks of PGY1, the intervention cohort (2019) had a significantly higher average number of EPAs completed per trainee (47.4 [SD 11.8]) than the pre-intervention cohort (25.3 [SD 6.7]) (p<0.001) (Cohen's d=2.3). No significant difference existed in the number EPAs obtained between the 2017/2018 cohorts, with averages of 24.3 [SD 6.8] and 26.1 [SD 7.0] per trainee respectively (p=0.6).

Conclusions: A case-based orientation led by CBME-experienced facilitators nearly doubled the EPA acquisition rate of our PGY1s. The constant EPA acquisition rate between the 2017 and 2018 cohorts suggests this post-intervention increase was not solely based on user familiarity with EPAs.

OE2-3-2, 60779

Lost in Translation: Adaptations to implementation of Competence By Design

Rachael Pack Western University, **Mary Ott** Western University, **Sayra Cristancho** Western University, **Melissa Chin** Western University, **JulieAnn Van Koughnett** Western University, **Michael Ott** Western University

Background/Purpose: Given the complexity of the transition to competency-based medical education (CBME) and the diversity of systems, programs and learning contexts, the literature has acknowledged that a one-size-fits-all approach to implementation is unattainable. Customization and adaptation of curricula are crucial to ensure that the aims of CBME can be realized. Examining these adaptations and their effects is a priority for implementation research.

Methods: This constructivist grounded theory study explores the implementation of a CBME curriculum organized around entrustable professional activities (EPAs). To examine how implementation was unfolding in daily practice, we conducted individual semi-structured interviews with 17 faculty members and 11 residents from surgical and perioperative programs. Data collection and analysis were iterative.

Results: While participants embraced the objectives of the new CBME curriculum, they overwhelmingly reported that EPAs, as designed, did not fit within the context of their programs. In our data, we identified a series of adaptive strategies (e.g., delayed completion, minimal feedback etc.,) employed by faculty and residents. These adaptations effectively allowed faculty and residents to 'workaround' EPAs. In effect, the practices of implementation we were inquiring about were not recognizable as CBME. However, our data contained rich evidence of pre-existing teaching practices that are not explicitly part of the CBME implementation plan, but that deliver CBME-informed expectations.

Conclusions: Our results illustrate that both adaptations of CBME curriculum and pre-existing pedagogical practices may dilute or foster the principles of CBME.

OE2-3-3, 60863

Evaluation of an Academic Coaching Program for Undergraduate Medical Students

Jeremy Chitpin Western University, **Stephanie Giberson-Kirby** Western University, **Jane Stokes-Rees** Western University, **Priya Subramanian** Western University, **Kyle Massey** Western University

Background/Purpose: Academic coaching is increasingly recognized as an effective learner performance intervention in competency-based medical education programs. Although sharing several key elements, North American Undergraduate Medical Education (UGME) academic coaching programs vary in structure, scope, and exclusions. Factors that contribute to sustainable coaching program within the Canadian context are not fully understood.

Summary of innovation: Western's UGME Academic Coaching Program was designed by melding available best practices with practical and contextual considerations. Student and coach feedback was collected at the end of the program's first year. In addition to the quantitative rating data, a qualitative content analysis was conducted using the coaches' and learners' narrative feedback. Deductive coding revealed several themes that describe our coaches' and learners' positive and negative coaching experiences.

Conclusions: Five primary thematic categories were identified; program structure, coach/learner skills, coach/learner tasks, relationship qualities, and implicit coaching assumptions. We discovered that implicit assumptions such as "coaching is only useful for struggling students," and role confusion between coaching and mentorship paradigms may affect the quality and outcomes of the coaching relationship. The data was used to refine communications provided to students, the program structure, and faculty coaching workshops and online resources. We caution that while program structure may facilitate increased collaboration between coach and learner, care should be taken to establish supports for students' needs that fall outside of the program scope. These findings reveal specific adaptions for the development of UGME coaching programs and may enrich medical education coaching paradigms.

OE2-3-4, 59953

An evaluation of the Surgical Foundations curriculum: a nationalstudy

Ekaterina Kouzmina Queen's University, **Stephen Mann** Queen's University, **Timothy Chaplin** Queen's University, **Boris Zevin** Queen's University

Background/Purpose: Canadian Surgical Foundations (SF) residency programs transitioned to Competency Based Medical Education in 2018. It is unknown how well the SF curriculum prepares surgery residents for peri-operative patient management.

Methods: We administered online surveys to 300 first-year English-speaking surgery residents across Canada to assess self-reported confidence in recognizing and managing seven common peri-operative patient presentations at 3 time points: pre-SF (Jul 2019), mid-SF (Dec 2019), and post-SF (May 2020). We conducted multi-station simulation-based OSCEs for surgery residents at our institution pre-SF (Aug 2019) and mid-SF (Dec 2019), and collected Workplace-Based Assessment (WBA) data for six pre-selected Entrustable Professional Activities (EPAs) (Jul 2019 - May 2020).

Results: 55 residents (18%) completed pre-SF, 31 (10%) completed mid-SF, and 52 (17%) completed post-SF surveys. Confidence in recognizing 6 out of 7 patient presentations was high pre-SF and did not improve significantly except for recognizing poor glycemic control (p <0.01). Confidence in managing 7 out of 7 patient presentations improved significantly (p<0.05). OSCEs performance did not change significantly between pre-SF and mid-SF (4(3.5-4.5) vs 4(3-4); p=0.28). Residents received high entrustment scores from the start of the SF curriculum and they improved significantly for 2 out of 6 EPAs. Only 56% of WBA assessments had narrative feedback, 16% of which had somewhat constructive feedback.

Conclusions: Participation in the SF curriculum lead to improved confidence of surgery residents in managing common peri-operative patient presentations, and greater level of entrustment for some EPAs. Consideration should be given to further faculty development to increase the quantity and quality of narrative feedback.

April 19th, 2021 - 12:00 EST
OE3 – 2 Simulation - Skills

OE3-2-1-60803

Using a simulation-based emergency airway mastery curriculum for CCFP-EM residents to teach airway management skills

Fil Gilic Queen's University, **Heather Braund** Queen's University

Background/Purpose: Emergency airway management requires complex skills typically taught through short courses and clinical exposure however, it is unlikely that robust learning occurs with this model. Using cognitive load theory (CTL), mastery approach, and the 4 Component Instructional Design (4CID) we designed a course including 12 monthly modules, high volume deliberate practice, and intermittent reinforcement using mental rehearsal. This research question guided our study: does such an approach to airway learning reliably produce mastery of the full spectrum of airway management skills?

Methods: 10 CCFP-EM residents in the 2019/2020 academic year completed the modules, 5 locally-developed Objective Structured Assessments of Technical Skills (OSATS), and 2 validated Objective Structured Clinical Evaluations (OSCE)s. A secondary task distraction (a buzzer that needed silencing) was present throughout the tests in order to increase the difficulty. OSATS were scored using validated Global Rating Index of Technical Skill (GRIT) and OSCEs using Queen's Simulation Assessment Tool (QSAT).

Results: The average grade on OSCE 1 was 4.1 (+/-0.54) and on OSCE 2 4.1 (+/-0.54). 9/10 of learners achieved the Superior GPR (Global Performance Rating) or higher on both. The average GRA on OSATS 1-5 were 4.4 (+/- 0.80), 4.1 (+/-0.70), 4.3 (+/-0.64), 4.0 (+/-0.89) and 4.0 (+/- 0.77) with 9/10 learners achieving Superior or higher on 4/5 tests and 1 learner achieving Competent on all 5 tests.

Conclusions: Our course reliably produced mastery on both OSCEs and OSATs, with 90% of the learners achieving the Superior or higher performance, despite the vide variety of skills sampled and the distracting secondary task.

OE3-2-2-60901

Enhancing Suicide Risk Assessment Skills Through Simulations in a Virtual Environment

Lauren Riggin Western University, **Priya Subramanian** Western University, **Sreelatha Varapravan** Western University, **Iouri Rybak** Western University, **Jin Liu** Western University

Background/Purpose: Suicide risk assessment is a core skill-set in psychiatry, but dealing with suicidal patients is emotionally and ethically challenging for medical students. Competence is dependent on clinical variables including patient volumes and supervision. Simulations can supplement this by providing repeated practice with feedback that is standardized, safe and cost-effective.

Summary of innovation: Five interactive, e-learning simulation cases were developed that included suicidal ideation comorbid with depression, schizophrenia, substance use disorders including alcoholism, personality disorders with non-lethal self-harm behaviors, and chronic medical illness. Students watched videos of simulated patient encounters that proceeded sequentially and were asked to choose response options. For each option at each stage, real-time feedback was provided. Students were encouraged to select the correct response before moving on to the next stage.

Conclusions: After establishing usability, reliability and validity, this medical education innovation was tested with a randomized control study design. 61 students were randomized to the e-learning intervention or in person psychiatry education as usual. We measured SIRI-2 scores to measure competence in responding to suicidal statements. The intervention group had a statistically significant improvement in SIRI-2 scores following the e-learning, compared to the control group (p=0.04). There was a significant improvement in confidence (p<0.01) and competence (p<0.01) following the intervention. There were no differences between this e-learning intervention and in person education as usual for confidence and competence. With limits to available clinical exposures for medical students, this tool offers a unique approach to enhancing medical education in suicide assessment.

OE3-2-3-60893

MacSim: novel, immersive, and technology-enhanced case siulations for undergraduate medical students

Kay Wu McMaster University, **Puru Panchal** McMaster University, **Alex Chan** McMaster University, **Avinash Pandey** McMaster University, **Maroof Khalid** McMaster University, **Samveg Shah** McMaster University, **Sudarshan Bala** McMaster University

Background/Purpose: Preclinical curriculum is often taught and evaluated discontinuously in foundation blocks. While simulations that enhance competency via deliberate practice are used in postgraduate medical training, this approach is often limited at the undergraduate level. Additionally, there tends to be few opportunities for students to directly contribute to curriculum development.

Summary of innovation: MacSim is a student-led, simulation-based educational workshop for medical students to develop both clinical and professional competencies. Comprehensive cases with decision pathways, representative of real clinical scenarios, were created by senior medical students and were reviewed by faculty. These were delivered to 66 first-year medical students in the McMaster Centre for Simulation-Based Learning. In teams, participants obtained a history, performed a physical exam, and developed and implemented an assessment and plan for a simulated patient. A custom EMR was created for participants to order and view labs and imaging. Patient vitals and telemetry were updated in real-time to reflect changes in status with treatment decisions. Feedback was delivered to participants by physicians who observed their performance through a one-way glass.

Conclusions: MacSim was well-received by medical students and faculty, demonstrating the value it adds to the existing curriculum. In the post-event survey, 86% of respondents (n=22) agreed MacSim helped develop clinical expertise and teamwork skills and 95% found the feedback they received valuable. They stated MacSim "translated theory into practice" and was "more interactive and educational than usual SP interactions". In the future, MacSim can be expanded to incorporate larger groups and more diverse clinical scenarios.

OE3-2-4-60481

Developing the Virtual Resus Room: Usability, Accessibility, and Applicability of a virtual simulation alternative for teaching and learning

Alim Nagji McMaster University, **Sarah Foohey** University of Toronto, **Teresa Chan** McMaster University, **Yusuf Yilmaz** McMaster University, **Matthew Sibbald** McMaster University, **Sandra Monteiro** McMaster University

Background/Purpose: Physical distancing restrictions resulting from the COVID-19 pandemic lead to the transition from in-person simulation teaching to online alternatives. The Virtual Resus Room (VRR), developed by the lead author, is an online setting in which learners can rehearse their crisis resource management skills and apply their knowledge using simulated patient cases.

Summary of innovation: The VRR uses Google Slides and Zoom to create an interactive virtual environment. Learners collaboratively complete tasks by making synchronous edits to their virtual "room", a shared Google Slide document consisting of a patient silhouette surrounded by moveable images of resuscitation equipment. Facilitators type in the vital signs in response to the learners' actions. Learners and facilitators communicate with each other using Zoom or an equivalent program. A program evaluation survey was completed by a group of 11 facilitators and 46 McMaster medical students after they used the VRR interface. Facilitators and learners reported high scores for usability, acceptability, and applicability. Students showed a significant improvement in their post-test scores (M=89.06±9.56) compared to the pre-test scores (M=71.17±15.77), t(34)=7.28, p<.001 with a large effect size Cohen's d=1.23.

Conclusions: This study established the utility of the VRR at the clerkship level. It has also been used to provide education to residents, with plans currently underway to expand its use to include remote, interprofessional faculty development. The VRR is an open-access resource that can easily be adapted to a multitude of cases, learners, and environments to provide an effective simulation experience.

OE3 – 1 Teaching & Learning - COVID

OE3-1-1, 60840

Response to COVID-19: Implementing a Combination of In-person and Remote Delivery of Laboratory-based Human Anatomy Education to Medical Students

Jobanpreet Dhillon McGill, **Sean McWatt** McGill, **Nicole Ventura** McGill, **Geoffroy Noel** McGill, **Mayssa Moukarzel** McGill

Background/Purpose: As remote teaching has become the forefront of education during the COVID-19 pandemic, medical curricula have been forced to adapt to provide quality education for core competencies. In particular, hands-on laboratory components have been largely reduced or removed from anatomy education to comply with social distancing guidelines. While this initially compromised typical learning environments, it also offered a unique opportunity to implement innovative teaching practices and assess their impacts on student learning.

Summary of innovation: In the 2020-2021 academic year, the Faculty of Medicine and Health Sciences at McGill University initiated a modified teaching strategy for the anatomy laboratory curriculum that combined limited hands-on cadaveric dissection with laboratory-adjacent remote activities using a 3-D software application (Complete Anatomy 2021). All first-year medical students had the opportunity to experience both teaching formats during the respiratory and cardiovascular anatomy units in the Fall 2020 semester. Our study evaluated the efficacy of this new curriculum delivery format by comparing the hands-on and remote teaching approaches on the following outcomes: (i) student and instructor experiences, (ii) students' approach to learning and performance, and (iii) time, resource, and cost considerations.

Conclusions: The implementation and assessment of this modified teaching strategy will help guide educational policy revisions targeted at maintaining student-centered learning activities during the current and future disruptions to in-person teaching. Furthermore, given the visuospatial nature of anatomy, our findings can be broadly applied to courses in other hands-on disciplines that have been forced to move online.

OE3-1-2, 60477

Implementation of case-based learning strategies in the development of an online clerkship curriculum during the COVID-19 pandemic.

Chad Kimmitt University of Calgary, **Allison Brown** University of Calgary, **Rahim Kachra** University of Calgary

Background/Purpose: Clerkship is an integral time in medical education to build clinical reasoning and communication skills on the foundation of content knowledge learned in pre-clinical years. Due to the COVID pandemic, clerks were removed from clinical rotations, necessitating a shift to virtual teaching.

Summary of innovation: Final year clerkship students were divided into 2 groups and completed 4 weeks of Internal Medicine teaching via Zoom. Teaching for the first cohort included physical examination teaching, didactic lectures, skills drills, Cardboard and Cards, two Calgary-developed virtual patient platforms. A needs assessment was performed and identified that case-based learning (CBL) methods were the preferred strategy. A CBL curriculum was implemented for the second cohort entailing small-group exercises, didactic lectures, Cards and Cardboard.

Conclusions: Data from our program evaluation (N=48) suggest the evolution to CBL was associated with multiple advantages during the virtual clerkship. Although students felt it could not replace traditional clinical teaching, 83% of students believed online teaching with a clinical focus organized around 1-2 organ systems per week cultivated clerkship-specific skills. This was especially true when delivered in a small group, CBL format which increased student engagement and allowed real-time questions with individualized feedback. Virtual patient platforms (Cards, Cardboard) were more effective than didactic lectures, and 95% of students believed that CBL should be incorporated into traditional clerkship teaching in the future. This study can inform future virtual clerkship teaching and can also be considered to supplement the traditional clerkship curricula beyond the pandemic.

OE3-1-3, 60252

Transformative Approaches to Global Health Education for Medical Students During COVID-19

Nikisha Khare University of Toronto, **Jacob Alhassan** University of Saskatchewan, **Carlyn Seguin** University of Saskatchewan, **Dr. Lori Hanson** University of Saskatchewan

Background/Purpose: At the University of Saskatchewan, a Global Health Certificate program was created to teach health advocacy and community engagement to medical students. Catalyzed by both the recommendations of a recent program review and the novel COVID-19 environment, a 6-week online practicum course was successfully developed and delivered to 17 medical students.

Summary of innovation: Practicum sites included Indigenous communities and advocacy organizations. A syllabus was developed that was informed pedagogically by anti-oppressive and transformative education principles to engender praxis through cycles of critical self-reflection, experiential learning, and in-depth exploration of processes of power and oppression. Online course components included (1) a 20 hours per week community placement, (2) weekly instructor-led guided reflection sessions and (3) assignments designed to promote a reciprocal advocacy process.

Conclusions: The participatory reflection sessions enabled students to critically contextualize their practicum experiences into theoretical frameworks of advocacy and health equity. Students commented on gaining new perspectives, being challenged by stimulating discussions, and developing their positionality within and sense of responsibility to the world. Instructors and students reflected on the central importance, rewards, and challenges of applying principles of humility and solidarity in building relationships with communities to engender mutuality, accountability, trust, and agency, a process that is further challenged by the online setting. Finally, COVID-19 was approached as a global health learning opportunity rather than an impediment. Students appreciated the topical nature of readings, videos and discussions exploring the profound impact of COVID-19 on pre-existing global health issues.

OE3-1-4, 60756

"COVID-19 as the equalizer": Evolving discourses of COVID-19 and implications for medical education

Vincent Tang University of Toronto, **Asia van Buuren** University of Toronto, **Tina Martimianakis** University of Toronto

Background/Purpose: The othering of individuals has been identified as a concern during the COVID-19 pandemic. The purpose of this study was to examine the popular press during early stages of the pandemic for: 1) emerging discourses that highlighted population-level inequities, and 2) the implications these discourses may have for medical education.

Methods: Using a critical discourse analysis (CDA) approach, an archive of public domain texts discussing COVID-19 was iteratively created, reviewed, and coded. It was analyzed for patterns of how COVID-19 highlighted structural and institutional inequity at the population level using an intersectional framework.

Results: We archived 86 texts published from March to June 2020. We focused our analysis on implications within Ontario. The two major discourses that emerged were "COVID-19 as equalizer" and "COVID-19 as discriminator". The former emerged in the early stages of the pandemic to mobilize public health recommendations and describe near-universal impacts on the public. The latter followed to highlight new and pre-existing forms of marginalization exacerbated by the pandemic in an attempt to motivate an equity-informed pandemic response.

Conclusions: There will never be another generation of medical learners that is not aware of COVID-19 and the ways in which it challenged our medical system. This study provides a unique perspective on how COVID-19 is understood through analysis of the public domain, and therefore, has implications for how the pandemic is framed for future medical learners. We hope that making visible how othering and stigmatization has been exacerbated by COVID-19 motivates equity-informed pandemic education.

OE3 – 3 Postgraduate

OE3-3-1, 60687

'Building Your Neurology Acumen': a flipped classroom approach to strengthen Internal Medicine residents' neurological skills

Zoya Zaeem University of Alberta, **Penelope Smyth** University of Alberta, **Vijay Daniels** University of Alberta

Background/Purpose: Rotating internal medicine (IM) residents do not feel adequately prepared to approach patients with neurologic issues. This may be due to a variety of factors. The purpose of this project was to conduct a needs assessment to determine the optimal components and delivery of a neurology curriculum for internal medicine residents.

Methods: We utilized a mixed-methods design and recruited participants through a combination of purposive and convenience sampling. We conducted interviews with IM residents (n=12) and focus groups with neurology residents (n=7) and neurology staff (n=8). Also, IM residents completed entry- and post-call surveys while on a neurology rotation.

Results: We performed a deductive analysis organizing qualitative themes (by consensus) according to Kern's framework for curriculum development: 1. Problem: Discomfort and perception of under-preparedness amongst IM trainees 2. Needs Assessment: What the learners (stakeholders) think they need to know vs. what their teachers want them to know vs external requirements (Royal College) 3. Goals/objectives: What content is relevant for clinical requirements vs assessments? Are they mutually exclusive? 4. Methods and setting: Didactic vs bedside vs virtual 5. Implementation of the curriculum: Educational days vs bedside vs scheduled rotation teaching 6. Evaluation and feedback: Curriculum could be evaluated with surveys, performance on rotation, and board examination results

Conclusions: Our findings illustrate a possible mismatch between internal medicine residents' needs and neurologist teachers' expectations in teaching neurology. Addressing learners' needs could enhance neurology knowledge and sense of preparedness when encountering patients with neurologic issues.

OE3-3-2, 60939

Identifying Learning Needs in Medical Assistance in Dying: from the Perspective of Internal Medicine Residents

Krista Reich University of Calgary, **Jaqueline Hui** University of Calgary, **Amy Tan** University of Calgary

Background/Purpose: Medical Assistance in Dying (MAiD) was legalized in Canada in 2016. There have been a total of 13,946 medically assisted deaths between 2016-2019. Integration of MAiD into the medical curriculum is important to provide trainees with the skills to care for patients requesting MAiD. We determined the learning needs in MAiD for Internal Medicine (IM) residents.

Methods: At an academic session, residents were recruited and completed three patient cases created to test situational judgement and knowledge in MAiD. Cases were discussed and recorded in a group setting guided by a MAiD expert. Written responses and transcripts were analyzed manually to identify themes and key quotes of learners' perspective on MAiD.

Results: Twenty-eight residents participated (44% response rate). Three high level categories were identified that outline the approach residents have to a MAiD request: Action, Reaction, and Decision Making. Residents are comfortable taking action in managing acute and chronic medical problems near end of life and create an environment for shared decision-making. However, they lack knowledge in basic MAiD eligibility criteria and struggle with the concept of "do no harm" in this context. When making decisions, residents prioritize a pragmatic approach to requests for MAiD and are limited in their discussion around managing personal reactions.

Conclusions: IM residents require content based teaching on MAiD, but there is an additional need for an approach to end of life care discussions, specifically around addressing uncertainty and personal reactions. This is important because these emotions and personal reactions impact decision making, patient care, and resident wellbeing.

OE3-3-3, 59642

Informing a medical assistance in dying curriculum in specialty residency training programs

Susan MacDonald Queen's University, **Sarah LeBlanc** Queen's University, **Mary Martin** Queen's University, **Adam Fundytus** Queen's University, **Marie-Josee Lafleche** Queen's University, **Ross Walker** Queen's University, **David Taylor** Queen's University, **Karen Smith** Queen's University, **Richard van Wylick** Queen's University, **Rylan Egan** Queen's University, **Karen Schultz** Queen's University, **Nancy Dalgarno** Queen's University

Background/Purpose: Medical assistance in dying (MAID) became legal across Canada when Bill C-14 was passed in 2016. Currently, little is known about practitioner interest in MAID education, the most effective strategies for providing MAID education, and the importance of integrating MAID into existing curricula. This study examines and compares residents' and faculty preceptors' perspectives about MAID.

Methods: Two anonymous surveys were distributed to residents (n=549) and preceptors (n=797) in 29 different specialty programs. Survey data was analyzed using descriptive and inferential statistics.

Results: Response rates were 23.1% for residents and 13.0% for preceptors. Preceptors were more comfortable and competent discussing MAID with a patient compared to residents ($p<0.00$ and $p=0.007$, $\alpha=0.05$), though residents were more likely to want to participate in a MAID assessment ($p<0.000$). The majority of both residents (73.5% ± 8.0%) and preceptors (79.0% ± 8.0%) believe it is important to include MAID education in their specialty's curriculum. The most important topics included the discussion of MAID with patients (90.4%[±5.4%] and 79.6%[±8.0%] of residents and preceptors, respectively) and regulations and legal aspects of MAID (87.0%[±6.2%] and 84.7%[±7.0%] of residents and preceptors, respectively).

Conclusions: Significantly more residents want to be part of the assessment and clinical teams providing MAiD compared to preceptors, however both groups agree that it is important to include MAID education in the curriculum of their specialty program. Next steps will focus on creating MAID learning outcomes and developing MAiD curriculum appropriate to the educational needs of each specialty residency program.

OE3-3-4, 59663

An innovative approach to Program Evaluation in PGME: Design, Development, and Implementation

Theresa Beesley McGill, **Carlos Gomez-Garibello** McGill, **Maryam Wagner** McGill, **Regina Husa** McGill, **Evelyn Constanin** McGill, **Armand Aalamian** McGill

Background/Purpose: Residency program directors are required to gather evidence to make decisions about their program, to improve its effectiveness, and to inform decisions. Recent changes to the CanRAC accreditation standards include program evaluation. However, residency programs have diverse needs, and program directors (PDs) have limited time and varied knowledge of program evaluation. In response, we developed an innovative approach to support program evaluation in the over 70 different residency programs, using a scholarly and iterative process. This innovative approach included standardized templates delivered alongside capacity-building workshops.

Summary of innovation: The innovative approach was implemented in two phases. Phase 1 included a capacity-building initiative for PDs as a one-day retreat. The retreat included three workshop activities using a stepwise approach to teaching principles of program evaluation, how to develop a logic model and evaluation matrix, and distributed logic model and evaluation matrix templates. Workshop activities integrated the CanRAC accreditation standards to provide PDs with concrete examples of how to use program evaluation to facilitate informed decisions on how to improve their residency program. Phase 2 included follow-up meetings with the education team members to review PD developed program evaluation plans. One-on-one support was offered to PDs once a month over the last year to assist PDs with the implementation of their program evaluation plans.

Conclusions: This innovative approach provides standardized program evaluation templates for PDs to use in their program evaluation process, contributes to capacity building in PGME for program evaluation, and is a practical process, which can be implemented in PGME across Canada.

April 19th, 2021 - 15:30 EST

OF1 – 1 CPD

OF1-1-1, 60591

The Opioids Clinical Primer: Design, Development, Delivery and Evaluation of an Open Access, Online Continuing Medical Education Curriculum

Anthony Levinson McMaster University, **Jennifer Wyman** University of Toronto, **Lori Mosca** McMaster University, **Mel Kahan** University of Toronto, **Lynn Wilson** University of Toronto

Background/Purpose: As part of Ontario's Opioid Strategy there was a need to expand education for healthcare providers who prescribe opioids. Our objective was to design, develop, and implement six accredited online courses for health care providers on a range of topics related to opioids.

Summary of innovation: Based on a needs assessment and feedback from a steering committee and expert advisory group, the six online courses related to both opioid use disorder and managing chronic pain were designed, developed, and implemented on the machealth platform (opioids.machealth.ca). Our project management method was based on the Successive Approximation Model (SAM). Subject matter experts and community practitioners provided feedback in an iterative process with regard to the design, development and evaluation of the courses and associated resources. Best-evidence principles of multimedia instructional design were utilized, such as interactive case-based scenarios. Each course is self-contained, but thematically linked to the others. In total the courses are certified for 10 credits.

Conclusions: As of Sept 2020, there have been over 1,765 program registrations, with over 1,220 course completions. Over 96% of learners who completed a course agreed that the learning experience was valuable, with 94% agreeing they would recommend the course to a colleague. 85% agreed that the courses helped them identify changes they would like to make in their current practice. The companion resource 'Buprenorphine Reference Guide' has been downloaded over 1,660 times. The courses are being used by a range of learners, including CME/CPD, PG and UGMD; and easily integrated into academic curricula and hospital training. Updates and dissemination are ongoing.

OF1-1-2, 60029

Reading of the Week: A Novel, National Program Offering "Just-in-Time" Education for Psychiatry Residents

David Gratzer University of Toronto, **Faisal Islam** CAMH, **Sanjeev Sockalingam** University of Toronto

Background/Purpose: Osler started the first journal club more than a century ago. Though technology has advanced, in our day as in Osler's, CME is challenging to deliver. This presentation discusses the Reading of the Week (ROTW), an innovative education project, aimed at Canadian residents of psychiatry, and the contribution of this project to residents' learning. ROTW summarizes the latest literature and is emailed out weekly through formal partnerships with 12 Canadian post-graduate programs; Readings are also available online. The selections cover everything from public policy to practice, including studies from the British Journal of Psychiatry and Lancet Psychiatry. Readings include commentary, providing a larger context. Like Osler's journal club, there is the opportunity to exchange ideas, with "letters to the editor." In the spring of 2019, we aimed to assess outcomes for ROTW using continuing medical education (CME) evaluation framework (Moore's framework).

Summary of innovation: A total of 332 responded to the online survey (a third of subscribers). 90% reported they "always or usually" read the summary. 97% were satisfied with ROTW; 93% agreed that ROTW had improved their understanding of the current psychiatry research; 60% shared ROTW to someone else at least once. "I have used the summaries to make better informed clinical decisions."

Conclusions: This presentation outlines the practical implementation and impact of a unique CME intervention aimed at addressing challenges related to remaining "up-to-date" amidst the vast amount of resources available in print and online. ROTW provides a boundless option for CME for trainees and providers.

OF1-1-3, 59513

Management of Patients with Morbid Obesity in Primary Care: Informing a CPD Event

Nancy Dalgarno Queen's University, **Boris Zevin** Queen's University, **Mary Martin** Queen's University, **Colleen Grady** Queen's University, **Linda Chan** Queen's University, **Robyn Houlden** Queen's University, **Richard Birtwhistle** Queen's University, **Karen Smith** Queen's University, **David Barber** Queen's University

Background/Purpose: Over one million Canadians have Class II or III obesity and are eligible to be referred by Primary Care Providers (PCP) for surgical and/or medical

weight loss; however, fewer than 7% are referred. The purpose of this study is to explore the knowledge, experience, perceptions and educational needs of PCPs in managing weight loss in primary care to inform development of a Continuing Professional Development (CPD) event.

Methods: Mixed method study combining a survey and focus groups with PCPs (n=591) in eastern Ontario. Survey data analyzed using descriptive and inferential statistics in SPSS. Thematic analysis utilizing an inductive approach completed on qualitative data through open coding with NVivo.

Results: The survey was completed by 103 PCPs (17.4%). Overall, 39.1% had participated in education on the management of patients with obesity in the past 5 years, however 88.5% believe there is a need for education on bariatric surgery. Seven focus groups with 17 PCPs were conducted. PCPs described lack of knowledge as a barrier to managing obesity in primary care. Topics suggested for CPD included general information about bariatric surgery (procedures, referral process, post-operative follow-up, surgical complications), effective weight-loss strategies, and availability of local resources.

Conclusions: Given the high prevalence of Class II and III obesity, PCPs are now key stakeholders for ensuring patients with obesity receive timely and high quality care. Understanding past experiences and perceptions of PCPs informed the development of a CPD intervention to support PCPs in providing quality and evidence-based care to their patients with obesity.

OF1-1-4, 60594

Paediatric Project ECHO® for Managing Pain in Children and Youth: Development and Use of Simulation-Based Scenarios to Enhance Healthcare Providers' Clinical Skills

Naiyi Sun The Hospital for Sick Children, **Jo-Ann Osei-Twum** The Hospital for Sick Children, **Chitra Lalloo** The Hospital for Sick Children, **Jennifer Tyrrell** The Hospital for Sick Children, **Giulia Mesaroli** The Hospital for Sick Children, **Shirin Ataollahi-Eshqoor** The Hospital for Sick Children, **Emily Louca** The Hospital for Sick Children, **Alison Dodds** The Hospital for Sick Children, **Annie Jiwan** The Hospital for Sick Children, **Linda Nguyen** The Hospital for Sick Children, **Senthoori Sivarajah** The Hospital for Sick Children, **Alyssa Gumapac** The Hospital for Sick Children, **Jennifer Stinson** The Hospital for Sick Children

Background/Purpose: Simulation-based learning mimics clinical practice whilst providing a safe learning environment. The Paediatric Project ECHO® Education Event (E3) offered in-person instruction on evidence-based care for pain management in a paediatric population. This presentation describes the development and evaluation of three paediatric simulation-based scenarios delivered as part of E3.

Methods: Contextual paediatric simulation scenarios were developed to support interdisciplinary learning. Simulations were co-facilitated by simulation educators and subject matter experts, with patients and caregivers represented by actors and a high-fidelity infant mannequin. Attendees participated in 15-minute scenarios followed by a 45-minute structured debrief. Acceptability and satisfaction as well as changes in knowledge and self-efficacy were assessed by a prospective, mixed-methods study with repeat measures. Surveys were administered at baseline, immediately post-simulation and at 6-months. Follow-up surveys will be administered at 12-months. This study was approved by the local Research Ethics Board.

Results: Participants reported moderate-to-high acceptability and satisfaction with simulation-based learning. HCPs endorsed the use of simulation-based learning for clinical skills development. Respondents agreed that "simulations were an effective way to develop communication and teamwork skills", with an average score of 6.2 ± 1.2. Perceived positive changes in knowledge and self-efficacy of pain topics were observed immediately post-simulation and at 6-months.

Conclusions: Simulation-based learning was successfully integrated into the E3 program for paediatric pain. Learner participation in the scenarios resulted in perceived increases in knowledge and self-efficacy, which will be re-assessed at 12-month follow-up.

OF1 – 2 Health & Wellness - COVID

OF1-2-1, 60755

Managing expectations, uncertainty, and growth: An autoethnographic lens on resilience building in clerkship and COVID-19

Zi Ying Zhao University of Toronto, **Airiss Chan** University of Toronto, **Andrew Perrella** McMaster University, **Alon Coret** University of Ottawa

Background/Purpose: Autoethnography is a qualitative research methodology with increasing popularity in medical education, wherein the author uses dedicated self-reflection to explore personal experiences and derive broader sociocultural understanding. The purpose of this project was to reflect on the nature of resilience - along with factors that foster and hinder it - using an autoethnographic lens.

Methods: Two third-year medical students reflected on transformative moments throughout their core clerkship (11 months of clinical work, 3 months of hiatus secondary to COVID-19). Reflections were guided by prompts - all centred on events, emotions, factors, and outcomes, and how each of these fit with their sense of personal progress. In an iterative process, the students met quarterly with two first-year resident physicians with previous experience in autoethnography to explore reflections and discuss broader implications.

Results: 40 reflections were written over 14 months. Major themes for building resilience included: learning to focus on internal validation and strength, self-worth outside of preceptor feedback, and viewing harsh criticisms and self-inflicted failure through a rational lens. Other key themes, especially in the context of the COVID-19 hiatus, were the inevitability of uncertainty in clinical work and finding solace in efforts instead of results. Both students found near-peer debriefing with residents to be therapeutic for augmenting change and growth.

Conclusions: Autoethnography provides a safe space for learners to grow and explore their 'insider' experience in the culture of medical training. Undergraduate medical programs should strongly consider implementing autoethnography and near-peer groups to improve student introspection and resilience.

OF1-2-2, 60568

Nurses and physicians' distress, burnout, and coping strategies during COVID-19: Sources of stress and impact on perceived performance and intentions to quit

Nigel Mantou Lou McGill, **Tina Montreuil** McGill, **Liane Feldman** McGill, **Gerald M. Fried** McGill, **Mélanie Lavoie-Tremblay** McGill, **Farhan Bhanji** McGill, **Heather Kennedy** McGill, **Pepa Kaneva** McGill, **Susan Drouin** McGill, **Jason M. Harley** McGill

Background/Purpose: Healthcare providers (HCPs) have experienced more stress and burnout during COVID-19 than before. Understanding HCPs' challenges, risks, and proactive factors during COVID provide an educational opportunity for training future physicians and nurses. We compared sources and levels of stress, distress, and approaches to coping between nurses and physicians, and examined whether coping strategies helped mitigate the negative impact of stress and intentions to quit.

Methods: Using a cross-sectional design, burnout was measured with the Maslach Burnout Inventory. Psychological distress was measured using the Depression, Anxiety, Stress Scale. A self-reported survey was used to evaluate stressors, impact on perceived performance, and intentions to quit.

Results: Responses of 119 HCPs from a hospital in Montreal were analyzed. Findings suggest that (1) Both nurses and physicians experienced more distress and burnout during COVID-19 than before. (2) Compared to physicians, nurses experienced a higher level of distress and burnout during COVID. (2) Adaptive coping strategies moderated the negative impact of stress on work performance. (3) Adaptive coping strategies moderated the negative effect of stress on burnout, which in turn reduced intentions to quit. That is, stress negatively impacted performance and burnout only for those with low, but not high, levels of adaptive coping strategies.

Conclusions: The current findings of HCPs' challenges, risks, and protective factors provide valuable information (a) on COVID-19's impact on HCPs, (b) to guide distributions of institutional supportive efforts, and recommend adaptive coping strategies, and (c) to inform medical education, such as resilience training, focusing on adaptive coping approaches.

OF1-2-3, 60659

"I am just waiting to step into the fire and there is nothing I can do about it:" An international study of learner perceptions regarding the impact of COVID-19 on their medical training and wellbeing

Allison Brown University of Calgary, **Aliya Kassam** University of Calgary, **Mike Paget** University of Calgary, **Kenneth Blades** University of Calgary, **Megan Mercia** University of Calgary, **Rahim Kachra** University of Calgary

Background/Purpose: The COVID-19 pandemic required a rapid reorganization of medical training globally in response to the urgent needs of the health system. Our understanding of how medical learners perceived the pandemic to have affected their training was limited.

Methods: A cross-sectional survey was conducted between March 25-June 14th, 2020, shortly after the World Health Organization declared COVID-19 a pandemic. The survey was available in 19 languages and collected quantitative and qualitative data to broadly explore learner perceptions on how their training and well-being were influenced during the initial spread of the pandemic.

Results: 6492 medical learners completed the survey from 140 countries. Most schools removed learners from the clinical environment and adopted online learning modalities, however, students expressed concerns about the quality of their learning and training progression. Most

trainees felt under-utilized and wanted to contribute in meaningful ways, particularly postgraduate learners, although some felt that providing care during a pandemic was beyond the scope of a trainee. Statistically significant differences were detected between levels of training and geographic regions for satisfaction with organizational responses, the impact of COVID-19 on wellness, and state-trait anxiety.

Conclusions: The disruption to the status quo of medical education was initially perceived by learners across all levels and geographic regions to have adversely affected their training and well-being, particularly amongst postgraduate trainees. This global study offers empirical insights into research and policy areas that warrant consideration, such as policies for clinical utilization of learners during public health emergencies.

OF1-2-4, 60761

Medical trainees in a COVID-19 world: The relations between level of training, personal health conditions and mental health outcomes

Yael Mayer University of British Columbia, **Ido Lurie** Shalvata Mental Health Center, **Noga Shiffman** Hilel Yafe Hospital, **Shir Etgar** Columbia University, **Tal Jarus** University of British Columbia

Background/Purpose: There is growing evidence on how the level of training and other risk factors, such as chronic health conditions may impact the mental health of medical trainees. During the COVID-19 pandemic, medical trainees and especially those with personal health conditions were more vulnerable to experience psychological distress. This study aimed to explore how the level of training as well as other health risk factors impacted the mental health outcome of medical interns, residents, and experts during the pandemic.

Methods: Participants in the study were 68 interns, 132 residents and 147 experts in various fields of medicine in Israel. Participants filled up an online survey including the Fear of COVID-19 scale, the depression and anxiety stress scale (DASS-21), and the mental health continuum scale to measure well-being.

Results: Participants with a disability or a health risk factor for COVID-19 experienced higher levels of fear of COVID-19, depression, anxiety, stress, and lower levels of well-being than participants with no health conditions. In general, residents experienced higher levels of stress and lower levels of well-being.

Conclusions: Medical residents, and especially residents with a disability or a health condition, are at risk of experiencing high levels of stress during the COVID-19 pandemic more than medical interns and experts. Therefore, educational programs must provide residents the support they need to cope with the psychological burden they may experience during the pandemic, while promoting a culture of legitimation to express emotional hardships and receive support.

OF1 – 3 Assessment SJT

OF1-3-1, 60714

Gaming the Medical School Application System: Revealing the Coaching Effect Size of a Constructed Response SJT

Heather Davidson Altus Assessments, **Kelly Dore** Altus Assessments, **Harold Reiter** Altus Assessments

Background/Purpose: Situational judgment tests (SJTs) are increasingly used for medical trainee selection, but the effects of test preparation strategies on these tests, especially open-ended SJTs, has not been explored. The greatest concern is coaching effects, as they threaten score enhancement driven by construct-irrelevant factors like response distortion and test-wiseness, and advantage high SES applicants with access to these resources. This study sought to examine the role of coaching effects on SJT performance.

Methods: We invited test-takers to indicate whether they used any of the following preparation strategies: read the tips for applicants on the test website, completed the free practice test, participated in a commercial test preparation course, studied potential questions based on assessment competencies, rehearsed responses with technology, and rehearsed responses without technology. We conducted a multiple regression analysis to compare the additive effect of each preparation method on SJT scores.

Results: Of the six preparation strategies, only completing the free practice test on the test website (b = 0.16, p < .001), studying potential questions based on the assessment competencies (b = 0.13, p = 0.02), and rehearsing responses with technology (b = 0.18, p < .001) provided significant additive benefit to test scores. Test preparation method only accounted for 2% of the overall variance in test scores (R^2 = 0.02, $F_{(6,2887)}$ = 14.44, p < .001).

Conclusions: Results suggest coaching effects are extremely small. These results highlight the importance of ensuring equitable access to practice tests, and relieves

concerns over potential socially regressive impact of commercial test preparation.

OF1-3-2, 60601

Is the Casper test a good predictor of medical student outcomes?

Xin Wei Yan Altus Assessments, **Timothy Wood** University of Ottawa, **Genevieve Lemay** University of Ottawa

Background/Purpose: Increasingly, medical schools are using non-academic characteristics in admissions towards more holistic decision making. Casper, a widely used SJT, has demonstrated reliability, however, little is known regarding its relationship with in-program non-academic measures or sociodemographic variables. This study aims to understand the associations between non-academic performance at admissions and in-program measures.

Methods: Graduating classes of 2020 and 2021 from University of Ottawa MD student data were retrospectively analyzed. Admissions data including demographics, interview score, Casper, and wGPA were compared to course grades, clerkship ratings and OSCE scores collected during training. Analysis included Independent samples t-tests, mon-parametric regressions, Spearman's rho, and multiple regression.

Results: Over the three graduation classes, the total number of students was (N=496). Of those, 55% were female, 67% had a bachelors, and the average age at the time of graduation was 22.4. There was no significant gender (p = .53 and .19), age (p = .41 and .68), language stream (p = .18 and .21) differences in Casper scores for both Classes of 2020 (p = .19 to .68) and 2021. Casper was significantly associated with professional and skill development OSCE score (b = 0.53, p = .02) for Class of 2020. The multiple regressions with GPA and Casper showed minimal total variance accounted for across clerkship scores (adjusted R2 = 0.03, p = .11; adjusted R2 = 0.08, p = .001).

Conclusions: Preliminary results suggest that Casper is significantly associated with OSCE, however, other academic and non-academic metrics only accounted for minimal total variance of in-program measures. Results from further analyses related to range restriction of scores and missing data will be reported.

OF1-3-3, 60752

Bridging the Gap: Improving CASPer Test Confidence and Competency for Underrepresented Minorities in Medicine through Interactive Peer-assisted Learning

Lolade Shipeolu University of Ottawa, **Johanne Matthieu** University of Ottawa, **Farhan Mahmood** University of Ottawa, **Ike Okafor** University of Toronto

Background/Purpose: The Computer-based Assessment for Sampling Personal characteristics (CASPer) is a situational judgement test (SJT) that is adopted by medical schools to assess for interpersonal and professional characteristics of applicants. Unlike conventional SJTs whereby test takers select their preferred response to an ethical dilemma from a series of choices, applicants writing the CASPer compose their own responses, thereby providing a window into the applicant's rationale for ethical decision-making. Underrepresented minority medical school applicants usually lack access to a network of individuals and/or resources that offer guidance and prepare them for the various application requirements of medical school.

Summary of innovation: Under the support of University of Toronto's Community of Support program, medical students at the University of Ottawa designed and taught a free online CASPer coaching program for underrepresented medical school applicants across Canada. The program consisted of 35 learners and three medical student tutors. Important attributes of the 4-week program included free access to a medical ethics book, insight sharing from three distinct tutors, feedback provision to in-class and homework responses, and facilitation of a mock CASPer test. Through extensive peer-to-peer mentorship, we aimed to reduce anxiety, improve confidence, and increase competency among minority students in our CASPer coaching program.

Conclusions: Results from our pre and post-program survey showed significant student improvement in familiarity with the test, increased competence, confidence and preparedness, as well as reduced anxiety (p<0.05). Through peer-to-peer teaching and access to medical student mentors, our program recognizes and addresses socioeconomic barriers that several minority applicants face when applying to medical school.

OF1-3-4, 60590

[Are age, gender, language, ethnicity and socioeconomic status associated with Casper scores? Findings from a multicenter study in Quebec, Canada](#)

Jean-Michel Leduc Université de Montréal, **Sébastien Béland** Université de Montréal, **Christian Bourdy** Université de Montréal, **Robert Gagnon** Université de Montréal, **Karina Cristea** Université de Montréal, **Nathalie Loye** Université de Montréal, **Martine Bourget** Université Laval, **Marie-Pier Carrier** Université Laval, **Claude Labrie** Université Laval, **Jean-Sébastien Renaud** Université Laval, **Isabelle Gauthier** Université de Sherbrooke, **Annie Ouellet** Université de Sherbrooke, **Saleem Razack** McGill, **Estelle Chétrit** McGill, **Xin Wei Yan** Altus Assessment

Background/Purpose: Casper is a situational judgment test widely used for selection in healthcare professions programs. Associations between sociodemographic characteristics and scores, which can impact diversity in admissions, were described in the USA. This study assesses subgroup performance differences for applicants in Quebec, Canada.

Methods: Sociodemographic data were collected using an exit-survey after Casper completion. Data from unique applicants to any of the four medical schools in Quebec were anonymized and linked with Casper z scores. A multiple regression model was created using backward stepwise regression.

Results: Of 5012 applicants who took Casper for the 2020 admission cycle, sociodemographic data was available for 3491 (69.7%). Overall, 17.3% were aged ≥26, 61.8% were women, 55.9% self-identified as white and 4.1% as black, 36.4% declared a family income <75,000$ and 19.3% spoke a different language than French or English. In a regression model, age ≥26 (β=-0.069; 95%CI -0.110;-0.028), male gender (β=-0.064; 95%CI -0.105;-0.022), language other than French or English (β=-0.102; 95%CI -0.136;-0.068), self-declared black race (β=-0.116; 95%CI -0.177;-0.055) were associated with significantly lower scores. Other non-white applicants had lower scores only if aged ≥26 (β=-0.125; -0.166;-0.084) or if their parental income was <75,000$ (β=-0.066; 95%CI -0.120;-0.012). Parental education level was non-significant.

Conclusions: For the 2020 application cycle in Quebec, Casper scores presented subgroup differences related to gender, age, language, parental income, and ethnicity/race. These findings are in accordance with previously published studies and need to be monitored and compared to subgroup differences observed with other admission tools such as academic measures to inform selection methods.

April 19th, 2021 - 16:30 EST
OF2 – 1 Health & Wellness

OF2-1-1, 60574

[Pandemic and Postponed Exams: Impacts on Resident Wellness](#)

Laila Nasser McMaster University, **Michelle Onlock** University of Toronto, **Natasha Snelgrove** McMaster University, **Kaif Pardhan** University of Toronto, **Tara Riddell** McMaster University

Background/Purpose: The COVID-19 pandemic resulted in worldwide lockdowns beginning in March 2020. Fears of overwhelmed hospitals led to significant changes in care provided by residents. Due to concerns regarding disease transmission, certification examinations in Canada were indefinitely postponed with minimal notice. This resulted in uncertainty and stress among residents in their certification exam year, many of whom were transitioning to practice. We explored residents' (a) perception of the pandemic's impact on their transition to practice, and (b) experience of exam cancellation, including personal and professional impacts.

Methods: We used qualitative description methodology. Residents from McMaster University and the University of Toronto were recruited through snowball sampling. In depth, semi-structured one-on-one interviews were conducted. Each was transcribed, reviewed and coded using content analysis by two members of the research team.

Four main themes were identified. Residents endorsed significant feelings of uncertainty and loss after spending months preparing for both their exam and transition to practice. They were acutely aware of potential impacts of the pandemic on learning and future career plans. There was also significant stress regarding the timing and format of rescheduled exams and impacts on licensure. However, they identified their residency training programs and colleagues as significant sources of support.

Conclusions: The COVID-19 pandemic has impacted all medical trainees and faculty. Our research demonstrates the impacts on certification year residents, including stressors and sources of support. This research may inform decision making during future waves of the COVID-19 pandemic or future disasters that will improve certainty and support during this critical year.

OF2-1-2, 60039

Medical Student Mistreatment and Reporting: A Journey

Amanda Bell McMaster University, **Meredith Vanstone** McMaster University, **Allyn Walsh** McMaster University, **Catherine Connelly** McMaster University

Background/Purpose: Over 50% of Canadian medical students report experiencing mistreatment, yet only a small proportion of students report these concerns to school administration. It is unknown how medical students make sense of their experiences of mistreatment and come to decide whether to formally report these experiences. A better understanding of this phenomenon will facilitate changes by the medical school to better support students.

Methods: This Constructivist Grounded Theory study interviewed 19 current and former medical students from one institution about their experiences with mistreatment and reporting. Anonymized transcripts were reviewed, coded and theory was developed.

Results: Students undergo a journey surrounding experiences of mistreatment in five phases: Situating, Experiencing and Appraising, Reacting, Deciding, and Moving Forward. Students move through these phases as they come to understand their position as medical learners and their ability to trust and be safe within this institution. Each experience of mistreatment causes students to react to what has happened to them, and then decide if they will share their experiences and reach out for support. They choose if they are going to report the mistreatment, at what cost and for what outcomes. Students continue through their training while incorporating their experiences into their understanding of the culture in which they are learning and continually resituating themselves within the institution.

Conclusions: This study revealed institutional mistrust from students especially as it related to reporting mistreatment. Interventions designed to support students and decrease exposure to mistreatment may be best focused on increasing organizational trust between students and medical school leadership. Students volunteered mechanisms to support them. Medical school administration should consider how they can increase trust with their learners while identifying areas of concern and procedures for intervening and providing more transparent resolutions.

OF2-1-3, 60737

5C's of understanding resident wellbeing on call: a quality improvement perspective in emergency psychiatry

Sandra Westcott McMaster University, **Tara Riddell** McMaster University, **Christopher Clarkstone** McMaster University, **Nick Kates** McMaster University

Background/Purpose: Concerns from educational stakeholders at McMaster University in 2019 regarding local Psychiatric Emergency Services (PES) led to a reappraisal of the service infrastructure and role of psychiatry residents. Although a valuable learning and required training experience, working in PES can be inherently stressful. A group of residents applied quality improvement (QI) methods to understand factors impacting resident wellness related to PES during this transformation, and to identify areas for ongoing improvement.

Methods: A QI process was utilized with four phases. First, the problem of resident wellness in PES was defined. A process map provided a working model to understand factors that may impact resident well-being. This was translated into a resident survey, the results of which were analyzed for themes and compared to data from various educational meetings and prior surveys. A subsequent resident survey was administered to explore possible solutions. Project results have been disseminated to key stakeholders to implement change through sequential PDSA cycles.

Results: Five major themes impacting resident wellness related to PES were identified - the "5Cs": communication, care management, comfort and environment, competing demands, and connectedness. It was subsequently recognized that for meaningful change to occur, control and courage were paramount. These concepts led to an expanded "5C+" model of resident wellness.

Conclusions: Results of this QI initiative will help inform hospital, department, and educational leadership as changes in PES continue to unfold. Although McMaster psychiatry residents' experience in PES was the primary focus, this model may be generalizable to learners and staff in other settings.

OF2-1-4, 60163

Promoting the Well-Being and Resilience of Health Professional Learners: Developing and Implementing an Interprofessional Academic Wellness Curriculum

Camila Velez McGill, **Emily Wasylenko** McGill, **Deborah Friedman** McGill, **Nicole-Ann Shery** McGill, **Emily Wasylenko** McGill

Background/Purpose: Health professional learners often experience significant distress that can impair their mental health, decision-making, and ability to thrive in their programs. Besides dealing with a demanding academic curriculum, clinical rotations, and constant evaluations, health professional learners also have to respond to their patients in a professional and compassionate manner. It is critical to equip learners with skills to problem solve and develop resilience within a challenging health care system.

Summary of innovation: Since 2016, the WELL Office in the Faculty of Medicine and Health Sciences at McGill University has been working to promote the well-being of learners from the School of Physical and Occupational Therapy, Ingram School of Nursing, and School of Communication Sciences and Disorders. The WELL Office is proactive in reaching learners through the Academic Wellness Curriculum and providing them with tools to becoming problem solving, critical thinking, and resilient health professionals. Concurrently, we are reactive in offering academic and mental health counselling. Curriculum topics include stress and time management, building resilience, finding positive solutions to negative interactions, managing perfectionism, grit, and leadership. The topics are based on feedback from learners in different forums, curriculum evaluations and exit surveys, and input from leadership, faculty, wellness consultants, and Assistant Dean, Student Affairs. Feedback has been positive and the desire for a longitudinal curriculum continues to grow.

Conclusions: This presentation will share the implementation process of the Wellness Curriculum, the nature of the curriculum sessions and feedback from learners, as well as recommendations for the successful development of a curriculum to foster health professional learners' well-being.

OF2 – 2 Works in Progress

OF2-2-1, 60309

A primer on persuasion: Teaching narrative-based advocacy for undergraduate medical students

Hilary Pang University of Toronto, **David Wiercigroch** University of Toronto, **Sabrina Yeung** University of Toronto

Background/Purpose: Advocacy is a health professions competency that is critical to improving the health of Canadians and requires accessible and persuasive communication skills. Yet, there is limited skills-based training dedicated towards advocacy communication. Medical residents who have completed health advocacy curricula have reported increased self-perceived competency and knowledge scores.

Summary of innovation: We designed a two-day workshop for undergraduate medical students enrolled in the community-based service learning curriculum of the University of Toronto MD Program. The seminar is designed around the Rhetorical Triangle framework of ethos, logos, and pathos. Students are to deliver a brief pitch presentation to key stakeholders. Using the flipped classroom model, participants are asked to watch a video example of a health advocacy pitch and to complete a guided "mind map", which involves applying the Rhetorical Triangle to a proposed ask. The workshop begins with a theory burst on the Rhetorical Triangle. Subsequently, students complete their mind map and practice their pitches in small breakout groups. The workshop concludes with a large-group debrief session identifying take-home lessons, and possible areas of career application. Finally, participants present their pitch to a community partner who asks questions for reflection and feedback.

Conclusions: Advocacy is a critical health professions competency yet there is a lack of opportunities to learn practical communication skills to advocate effectively. Upon completion of the workshop, medical students acquire practical experience developing a pitch, knowledge of best practices for persuasive communication, and ideas of how to apply this skill set in their career.

OF2-2-2, 60647

Moving Beyond a "Guest Speaker" Role: An Exploration of "nil appointments" for Community Partners Involved in Community-University Collaborations

Chelsea Jalloh University of Manitoba, **Karen Cook** University of Manitoba

Background/Purpose: Increasingly, medical education related to learning experiences such as service learning, population health and interprofessional education draws upon collaborations with community partners in capacities such as guest lecturers, placement supervisors and subject matter experts. While modest honoraria is provided for their involvement in some capacities, this project sought to engage in dialogue with community partners to explore ways universities could acknowledge and support their important roles in community-university collaborations (CUC). This dialogue included exploration of a formalized "nil appointment" for community partners.

Summary of innovation: In 2019/20, we conducted 12 interviews with community partners involved in CUC, many of whom are actively involved in medical education. Individuals were recruited to represent various roles in CUC and diverse lived experiences and identities. All individuals expressed interest in a form of university "nil appointment" including ideas of what that role might involve, and how people would come to hold the role and for what duration. In addition, supports such as subsidized transportation for travel to/from campus, access to university libraries and active living centers, inclusion on university email lists, and having access to space on campus were identified as valuable to differing degrees.

Conclusions: These preliminary interviews expressed support to continue to explore how to establish a formalized "nil appointment" role for community partners actively involved in CUC. As colleges of medicine commit to providing students with socially accountable educational experiences, institutions acknowledging community partners for their essential contributions to health professions education are essential elements of this commitment.

OF2-2-3, 60697

Morbidity and Mortality Rounds as a Learning Practice: A Critical Interpretive Synthesis

Paula Rowland University of Toronto, **Nathan Cupido** University of Toronto, **Simon Kitto** University of Ottawa, **Mathieu Albert** University of Toronto

Background/Purpose: Morbidity and mortality rounds (MMRs) are a learning practice that have been a part of medicine for more than 100 years. Recently, MMRs have become a site of interest for educators, hospital administrators, and governing bodies. As such, MMRs occupy a hybrid organizational space with multiple accountabilities. To date, there have been few examinations of processes of learning emerging in new iterations of MMRs, specifically how those logics of learning are interacting, complicating, or confounding one another.

Methods: To address this conceptual problem, we reviewed MMR literature using a critical interpretive approach. The aim of the review was to document how MMRs are constructed in the published literature and to interpret what those constructions imply about the nature of professional knowledge and learning within hybrid organizational spaces. Following a search and selection process, we included 60 articles in the dataset.

Results: Current literature reflects a range of competing imperatives in the design, delivery, and evaluation of MMRs. Some scholars have reflected on the possible implications of a single learning practice attempting to serve individual learning needs and organizational performance requirements. Despite this, there have been few empirical studies of the potential impact of these multiple imperatives acting on a single learning practice.

Conclusions: MMRs serve as an ideal site to explore the interactions between individuals, organizations, professions, and policy-makers. Understanding how knowledge is produced, contested and maintained across these boundaries is increasingly important for educators seeking to support clinical learning environments and lifelong learning in clinical workplaces.

OF2-2-4, 60819

Residency training experiences of residents with children: a phenomenology study

Erin Boschee University of Alberta, **Zoya Zaeem** University of Alberta, **Marghalara Rashid** University of Alberta, **Aditi Amin** University of Calgary, **Karen Moniz** University of Alberta

Background/Purpose: Residency training is a challenging and demanding period for many physicians. For many residents, the timing of residency training coincides with childrearing years. The proportion of female medical trainees and residents has also increased significantly in recent decades. Residency training may therefore have an impact on the timing and experience of pregnancy and parenting for many physicians.

Methods: We are in the process of conducting 15 interviews using transcendental phenomenology as a methodology. The phone interviews each lasted for around an hour. Our study population includes post-graduate medical education trainees at the University of Alberta who were already parents upon entry to residency or who became parents during their residency training.

Results: We performed a thematic analysis with our data which resulted in the following themes: 1) work-life balance; 2) support systems; 3) culture of residency; 4) impact on social interactions; and 5) clinical expectations. We divided our data into two portions to accurately reflect both the issues and solutions that were being suggested. The second part of our analysis resulted in themes which can be categorized as actionable solutions. These include: 1) scheduling flexibility; 2) family-inclusive events; 3) mentorship; 4) individualized residency plan; 5) supports for fathers; and 6) childcare options.

Conclusions: It is evident that despite the current focus on resident wellness, there are still immense challenges for individuals trying to navigate parenthood and residency. The hope is that the recommendations that come from this study can be implemented within residency programs across the country.

OF2 – 3 Faculty Development

OF2-3-1, 60069

The Impact of Local Health Professions Education Grants - Is it Worth the Investment?

Susan Humphrey-Murto University of Ottawa, **Simran Aggarwal** University of Ottawa, **Kyle Walker** University of Ottawa, **Nina Dhillon**, **Timothy Wood** University of Ottawa

Background/Purpose: The rapidly evolving pace of medical education calls for rigorous research to inform the development of educational practices. Despite the well-established fact that funding improves quality of research in medical education, funding is limited. The development of local grant programs aims to address this gap in funding; given the amount of money awarded and the resources taken to administer these programs, it is important to evaluate relevant outcomes. The purpose of this project is to analyze factors predicting the success of these grants by studying the impact of two local medical education grants programs at a single university in a Canadian context. The following two questions will be addressed: 1) What have been the outcomes of the grants? 2) Can we identify factors that appear to contribute to the success of those projects funded?

Methods: We distributed an electronic survey to previous Department of Innovation in Medical Education (DIME) and Department of Medicine (DOM) grant recipients (n=108) to gather information pertaining to PI demographics, grant-funded research outcomes and dissemination, and factors leading to success in research. A literature search (Medline, Scopus) was performed to obtain records for non-responders. Multivariable logistic regression and backward logistic regression was used to determine the effects of collected variables on publication success.

Results: In total, 67 cases were analyzed for 10 variables and two were found to be statistically significant in predicting likelihood of publication success. The odds of publication were 3 times higher for researchers who had presented their research either orally or as a poster. In addition, the odds of publication were more than 6 times higher for researchers receiving grants through DIME vs. DoM, suggesting that differences between the structure of the two programs plays a significant role in the success of its recipients.

Conclusions: The results of this study inform both DIME and the DOM about the ongoing success of their funding programs and, on a larger scale, guide Canadian centers looking to institute or improve their local grant programs in medical education. Identification of factors associated with publication can both help inform local grants development and promote grant recipient success. Rigorous research and thoughtful innovation in medical education has the potential to benefit trainees, and ultimately our patients.

OF2-3-2, 60580

Developing and Delivering Incentives for Clinical Teaching: Proceed with caution

Katherine Wisener University of British Columbia, **Erik Driessen**, **Cary Cuncic** University of British Columbia, **Cassandra Hesse** University of British Columbia **Kevin Eva** University of British Columbia

Background/Purpose: When medical education programs have difficulties recruiting or retaining clinical teachers, they often introduce incentives to help improve motivation. Unfortunately, previous research has shown incentives can have unintended consequences, but when and why that is the case in the context of incentivizing clinical teachers is unclear. The purpose of this study was to understand how teaching incentives have been perceived to provide recommendations to those seeking to better support medical teachers.

Methods: Following an interpretive description methodology, a purposeful sampling strategy identified a heterogenous sample of clinical faculty teaching in undergraduate and postgraduate contexts. Sixteen semi-structured interviews were conducted and iterative analysis led to a thematic structure that accounted for general trends and individual variations.

Results: Clinicians articulated interrelated and dynamic personal and environmental factors that had linear, dual-edged and inverted U-shaped impacts on their motivations towards teaching. Clinical teachers felt valued when they felt recognized and connected to learners, peers, leadership, and/or the medical education community. While incentives aimed at producing these connections could be perceived as supportive, they could also negatively impact motivation if they were impersonal, inequitable, inefficient, or poorly framed.

Conclusions: Implications of this work include proceeding with caution when labeling any particular factor as a motivator or barrier to teaching. Rather, clinical teachers' perceptions are unique, dynamic and fluid. Incentives, therefore, need to be designed with nuance based on what makes clinicians feel valued. Further, any reward scheme should be crafted and delivered with care to lower the risk of reducing motivations to teach.

OF2-3-3, 60592

A Pan-Canadian Evaluation of the College of Family Medicine Canada's Fundamental Teaching Activities Framework

Rachelle Lee-Krueger University of Ottawa, **Douglas Archibald** University of Ottawa, **Katherine Moreau** University of Ottawa, **Dianne Delva** Queen's University, **Viola Antao** University of Toronto, **Cheri Bethune** Memorial – University of Newfoundland, **Vina Broderick** Memorial – University of Newfoundland, **Kaylee Eady** University of Ottawa, **Catherine Giroux** University of Ottawa

Background/Purpose: The primary purpose was to conduct an evaluation of the CFPC's Fundamental Teaching Activities (FTA) in Family Medicine Framework.

Methods: Using a practical participatory evaluation approach a partnership between the project team and members of the CFPC Faculty Development Education Committee (FDEC) solidified the evaluation design, development of data tools, implementation strategies, validated key findings, and dissemination. Faculty Development programs across Canada were targeted for this evaluation, particularly Faculty Development Directors, Postgraduate Directors, and Site Directors were invited to participate. Mixed methods consisting of an online survey sent by FDEC to all Family Medicine Faculty Development Directors, Postgraduate Directors, and Site Directors and follow-up interviews with self-selected participants conducted by the research team.

Results: The surveys were distributed to the 15 Faculty Development Directors, the 18 Family Medicine Program Directors and 174 Family Medicine Site Directors in the Fall of 2018, soliciting response rates of 80%, 66.7%, and 19.5% respectively. Interviews were conducted with a representative sample of 12 survey participants in Winter and Spring of 2019. Surveys and interviews were conducted in either French or English. Survey and interview responses suggest that awareness of the FTA was highest among Faculty Development Directors. There have been varied levels of implementation of the FTA framework across the country.

Conclusions: Recommendations to reduce barriers to implementation, such as readability and clarity of the FTA framework and highlighting the collective and individual values of the framework will be presented.

OF2-3-4, 60339

Inter-Professional Faculty Development in small groups - the importance of a safe environment.

Erica Amari University of British Columbia , **Wilson Luong** University of British Columbia , **Jenn Clark** University of British Columbia , **Katherine Wisener** University of British Columbia , **Brenda Hardie** University of British Columbia , **Sue Murphy** University of British Columbia , **Robin Roots** University of British Columbia , **Donna Drynan** University of British Columbia , **Julia Klick** University of Northern British Columbia, **Rose Hatala** University of British Columbia , **Kiran Veerapen** University of British Columbia

Background/Purpose: Faculty Development (FD) utilizing inter-professional small groups is uncommon. At the University of British Columbia, we implemented a longitudinal FD program where faculty from various health professions taught and learned from each other. We sought to understand how the inter-professional setting impacts teaching and learning in FD.

Methods: Eight cohorts of five to eight participants each, met for six, 90-minute sessions that were moderated by FD leads over one year. Each participant developed and delivered an interactive lesson on a key educational topic. Participants gave structured feedback; dialogue and reflection were encouraged. A safe space was actively promoted through modeling of respectful, collaborative communication by the facilitator, corresponding ground rules and a focus on educational topics. Interviews were conducted with seven participants and seven cohort leaders. Preliminary content analysis was conducted by two of the authors by coding the transcripts and identifying themes.

Results: Participants reported feeling safe in sharing their experiences and perspectives more freely in these groups than in their own uni-professional groups. They began to appreciate commonalities and variations in how health professions applied educational principles. They took into consideration the needs and perspectives of other professions when planning lessons, resulting in a fresh approach. Over time, the feedback and discussions became robust, and participants incorporated the observed learned strategies in their own practices.

Conclusions: Longitudinal FD in small groups with active participation of inter-professional faculty in a safe environment promotes a deeper understanding of how other professions teach and work and enhances the feedback process.

April 20th, 2021 - 10:00 EST
OG1 – 1 Learning Outcomes

OG1-1-1, 60626

Developing a New Measure of Cultural Sensitivity for Health Professions Learners

Eleftherios Soleas Queen's University, **Jennifer Carpenter** Queen's University, **Nicholas Cofie** Queen's University, **Jessica Baumhour** Queen's University, **Rylan Egan** Queen's University

Background/Purpose: Immersion in other cultures is a transformative learning opportunity for learners to become lifelong advocates for all their patients. To measure the efficacy of these experiences, a validated instrument to measure change on the relative cultural sensitivity, is necessary. The last validated instrument was revised in 2002 (Neuliep, 2002). We live in a more socially aware era than when these items were written and crafted. To sincerely understand people's latent perceptions, we need a shrewder instrument that cannot be as easily 'gamed' for a socially desirable outcome.

Methods: This instrument development combined 12 expert consultations and the narrative experiences of 95 health professions students and then rigorously applied item-response theory and instrument development science to develop a generalizable scale of cultural perceptions.

Results: The developed scale was prototyped with an interprofessional sample of health professions students and analysed using correlation analyses and exploratory factor analysis revealing a 4-factor structure. From these findings, items were dropped and the scale trimmed to a final form.

Conclusions: The constructs of this instrument are highly interdisciplinary and transferable across health professions and beyond. For example, electives/placements for nurses, physiotherapists, and medical trainees expose learners to many different health provision and learning contexts that may have very different cultural feels to them. This instrument would offer a means for measuring the efficacy of these training programs to increase learner advocacy and cultural sensitivity. We look forward to freely sharing our learning and instrument with any health professions educator to promote the development of health advocates everywhere.

OG1-1-2, 60911

Teaching Medicine to a General Public: How to Assess If Your Audience Is Learning

Malgorzata Kaminska University of Northern British Columbia, **Trina Fyfe** University of Northern British Columbia, **Cirisse Stephen** University of British Columbia , **Lisa Munro** University of Northern British Columbia, **Sonya Kruger** University of Northern British Columbia, **Lindsay Mathews** BC Cancer Agency, **Peyton Fisher** University of British Columbia

Background/Purpose: Public medical education programs (e.g., Mini Med Schools (MMS)), frequently limit evaluations to self-reported learner satisfaction. Based on Kirkpatrick's evaluation model, other methods could be used to assess educational impact. Instruments such as retrospective pre/post surveys (RPPS) detect a shift in learners' understanding, while script concordance tests (SCTs) measure clinical reasoning. Unaware of any publications about knowledge increase, application, or retention in MMS participants, we wondered whether RPPS and SCTs be used to evaluate such programs?

Methods: A 6-week MMS for the general public consisting of weekly 2-hour lectures on basic sciences and biomedical topics was delivered by medical faculty, covering material similar to medical school lectures. RPPS and SCTs were administered to all participants at the end of each lecture with SCTs repeated 8 weeks post-MMS.

Results: 59 participants (<16 to 69 years old) with diverse educational backgrounds took part in the MMS. RPPS showed an increase of at least 2 points on a 6-point Likert scale for each session. The SCTs' Cohen d effect size between participants and experts was 2.81 (98% response rate), remaining unchanged post-MMS (47% response rate). The SCT instrument Cronbach's alpha was 0.69. 98% of participants found assessments to be "fun and useful".

Conclusions: The RPPS consistently showed significant self-assessed increases in understanding of the material presented. The ability of our varied non-medical participants to apply newfound medical knowledge in SCTs was within the effect size typical for medical students. The ability to apply this knowledge 2-3 months later was maintained over time. RPPS and SCTs can be used to help guide and improve MMS curricula, thus ensuring that the intended knowledge is successfully transmitted.

OG1-1-3, 60553

Examining Diagnostic Radiology Residency Case Volumes from a Canadian Perspective: A Marker of Resident Knowledge

Benjamin Kwan Queen's University, **Omar Islam** Queen's University, **Alexandre Menard** Queen's University, **Benedetto Mussari** Queen's University, **Lynne Meilleur** Queen's University, **Nancy Dalgarno** Queen's University, **Nicholas Cofie** Queen's University

Background/Purpose: New guidelines from the Accreditation Council for Graduate Medical Education (ACGME) have proposed minimum case volumes to be obtained during residency but there are currently no minimum case volumes standards for radiology residency training in Canada. Using data from a pilot study, we examine radiology resident case volumes among recently graduated cohorts of residents and determines if there is a link between case volumes and measures of resident success.

Methods: Resident case volumes for three cohorts of graduated residents (2016-2018) were extracted from the institutional database. Achievement of minimum case volumes based on the ACGME guidelines was performed for each resident. Pearson correlation analysis (n = 9) was performed to examine the relationships between resident case volumes and markers of resident success including residents' relative knowledge ranking and their American College of Radiology (ACR) in-training exam scores.

Results: A statistically significant, positive and strong correlation was observed between residents' case volume and their relative knowledge ranking ($r = 0.682$, $p < 0.05$). Residents' relative knowledge ranking was also strongly and positively correlated with their ACR in-training percentile score ($r = 0.715$, $p < 0.05$).

Conclusions: This study suggests that residents who interpret more cases are more likely to demonstrate higher knowledge. This highlights the utility of case volumes as a prognostic marker of resident success. The results also underscore the potential use of ACGME minimum case volumes as a prognostic marker. These findings can inform future curriculum planning and development in radiology residency training programs.

OG1-1-4, 60741

Utilizing a Community Health Incubator as a Novel Health Advocacy Education Tool

Youshan Ding Western University, **Lorelei Lingard** Western University, **Nick Maizlin** Western University, **Tharsan Kanagalingam** Western University, **Yashasavi Sachar** Western University, **Jess Rhee** Western University, **Sumit Dave** Western University, **Zhan Tao Wang** Western University, **Taryn Taylor** Western University

Background/Purpose: Health advocacy is a vital pillar of the CanMEDs competency framework, yet it is difficult to teach and assess. Service learning may address this deficit, but is implemented heterogeneously across medical schools in Canada and produces inconsistent learning outcomes. Although business incubators are commonly used to teach intangible skills and drive innovation, the use of an incubator to teach advocacy remains unexplored in medical education.

Summary of innovation: Accel Labs is a social incubator that supports student-led teams seeking to build community health projects. Design thinking approach to healthcare innovation underpins our application process, which asks applicants to empathize with a target population, describe specific needs and ideate a solution. Selected teams receive funding and expert mentorship to propel projects through the startup phase. Multidisciplinary workshops in business, design and public health, are provided to teach practical skills for launching startup initiatives. Overall, 4 projects aimed at improving health outcomes in marginalized populations were funded and matched with mentors. Structured survey measuring self-perceived ability to engage in health advocacy was given upon acceptance and tracked over time. Improvements in attitudes toward health advocacy and perceived ability to generate impact was found amongst trainees enrolled in the incubator.

Conclusions: By utilizing an incubator framework, students receive a unique and engaging learning opportunity while generating positive health impact for underserved groups. This structured framework can be replicated to develop multidisciplinary skills, build partnerships across sectors and foster a spirit of social entrepreneurialism that may be critical for effective health advocacy.

OG1 – 2 Rural Medicine

OG1-2-1, 60473

Surrounded by slippery slopes: Navigating paradox while living and practising in rural communities

Andrea Gingerich University of British Columbia, **Kevala van Volkenburg** University of Northern British Columbia, **Sean Maurice** University of British Columbia, **Christy Simpson** Dalhousie University, **Robin Roots** University of British Columbia

Background/Purpose: Rural practitioners who develop a sense of belonging in their community tend to stay; however, belonging means having neighbours as patients and makes incidental encounters with patients outside of the clinic unavoidable. Despite its impact on retention, the navigation of overlapping personal and professional relationships remains largely undescribed and educational efforts would benefit from its explication.

Methods: Constructivist grounded theory guided the iterative recruitment and analysis of interviews with 22 physiotherapists (PTs) living and practising in rural, northern or remote communities.

Results: During incidental encounters, PTs wanted to show compassion as a good neighbour while also protecting patient confidentiality. Similarly, they recall practice standards advise referral to avoid overlapping relationships but neighbours sought care from someone they knew and who knew them; plus, referrals could block access to care. Further complicating decisions was the view that outcomes were improved by tailoring care based on knowledge of the patient as a community member; but, mitigation strategies were also needed when judgment was identified as being clouded by overlapping relationships.

Conclusions: Overlapping relationships tend to be seen as a step away from the ethical and towards a slippery slope of poor decisions. For rural PTs it seemed more like being between a rock and a hard place with slippery slopes in sight. Their grappling with the inherent contradictions is consistent with a paradox mindset. Conceptualizing overlapping relationships as paradox offers new possibilities for teaching and critiquing how to be professional while rural.

OG1-2-2, 60501

Stay on MD: Recruitment and Retention Factors for New Brunswick Medical Graduates

Kathleen MacMillan Dalhousie University, **Keith Brunt** Dalhousie University, **Sarah Melville** Dalhousie University, **Daniel Dutton** Dalhousie University, **Alexandra Fournier** Dalhousie University, **Peggy Alexiadis Brown** Dalhousie University

Background/Purpose: The Dalhousie Medicine New Brunswick medical school distributed medical campus opened in 2010, however, there is no data about where the graduates choose to practice. The objectives of this study are: to evaluate the factors that compelled the 2014 graduates to choose to practice in select locations; to learn where the class of 2021 would like to practice, and the factors that compelled them to choose select locations; and to compare the factors that influenced the chosen practice location.

Methods: The graduates of the 2014 class (N = 28) were asked to complete a questionnaire about their choice of practice location and preferred medical specialty. The class of 2021 (N = 28) were also asked to complete a similar questionnaire. Quantitative data regarding migration patterns in NB were extracted from the Canadian Institute of Health Information to compare trends with the data collected from the questionnaires of each class.

Results: The median number of physicians over 65 years old who are practicing in NB has increased by 32.7% from 2008 to 2018. In this same time period, the total physicians per capita has increased by 25.7%. We received 19 of 28 responses from the class of 2014 and 11 of 28 from the class of 2021. Most respondents indicated personal and social reasons for practicing in specific locations (2014: 14/19 vs. 2021: 10/11). From the class of 2021, 82% of respondents (9/11) wanted to practice in NB. From the class of 2014, 53% (10/19) are practicing in NB.

Conclusions: The results from this study provide evidence-based feedback about recruitment and retention rates of physicians in NB in relation to the objective of the medical school distributed medical campus.

OG1-2-3, 60822

The Impact of a Pre-Clerkship Self-Learning Module (SLM) to Improve Student Knowledge and Interest in Rural Medicine and Rural Health

Celina DeBiasio University of Ottawa, **Timothy Wood** University of Ottawa, **Charles Su** University of Ottawa, **Craig Campbell** University of Ottawa

Background/Purpose: 21.4% of Canada's population resides in rural communities, while only 9.4% of physicians practice in these areas. Numerous attempts to address this discrepancy exist, including mandatory medical undergraduate rural rotations. However, current standardized training methods designed to prepare students for different clinical and cultural interactions are extremely limited. In response, we developed and implemented a novel online pre-departure SLM for first-year medical students. The goal of this study is to evaluate the SLM's impact on students' interest and self-assessed knowledge of rural medicine.

Methods: Survey questions were developed in consultation with rural medicine education experts. Measurement consisted of rating scales (1-5) and comment boxes. Pre and Post-SLM surveys were distributed to students. Surveys assessed students' rural background, knowledge, and interest in rural medicine as well as their opinions on the importance of the SLM.

Results: 31 of the 136 students identified as having lived in a rural area (control group). Post-SLM items related to rural medicine interest and self-assessed knowledge, showed an increase in all categories, including interest in pursuing a career in rural medicine for students who had lived in rural areas (M=3.4; M= 3.5) and those who did not (M= 2.8; M= 3.0). Comments were generally positive.

Conclusions: In showing the feasibility of developing a rural education SLM, we have successfully implemented a virtual standardized training program. This SLM can be expanded to other Canadian medical schools to help prepare medical students for rural medicine experiences and ultimately increase interest in rural medicine and related career opportunities.

OG1-2-4, 60487

A student's background is important to rural and northern practice recruitment, but what about rural placements?

Robin Roots University of British Columbia, **Anne Worthington** University of British Columbia, **Andrea Gingerich** University of Northern British Columbia, **Sue Murphy** University of British Columbia

Background/Purpose: Rural communities remain medically underserved due to the maldistribution of health professionals. Substantial modifications to selection processes and curricula in health profession education programs aim to increase recruitment and retention in rural locations, but evidence of their impact has been inconclusive.

Methods: Five years of student data (n = 281) from the Master of Physical Therapy program at the University of British Columbia was analyzed with multiple binary logistic regression to identify which 'nature' (background) and 'nurture' (exposure to rural practice settings) indicators were most predictive of rural and northern practice outcomes.

Results: Students with a rural background were 2.7 times more likely to go into rural practice and those with a non-science degree were 5.2 times more likely. For every one additional clinical placement completed in a rural community, students were 1.6 times more likely to go into rural practice. Students with a rural background were 6.2 times more likely to go into northern practice. At admission, for every one-point increase in self-reported intent to practice rural/remote, students were 3.8 times more likely to go into northern practice and those with interest in northern practice were 5.8 times more likely to go into northern practice.

Conclusions: Nature (rural background, non-science degree) and nurture (number of rural clinical placements) predicted rural practice. However, only nature (rural background, interest in northern or rural/remote practice) predicted northern practice. Therefore, modifications to both admissions criteria and curricula are needed to address maldistribution of physiotherapists.

OG1 – 3 Distributed Medical Education

OG1-3-1, 60218

Improving Resident Education and Patient Care through National Physician Licensure

Brandon Tang University of Toronto, **Bernard Ho** University of Toronto

Background/Purpose: The lack of a unified national physician licensure in Canada restricts physician mobility and negatively impacts patient care. Currently, working in a different province/territory requires a separate medical license for each of the thirteen medical regulatory authorities, despite similarities in licensure processes and required documentation. These barriers limit the exposure of early career physicians including residents, while restricting access to physician care, especially in rural communities.

Summary of innovation: Resident Doctors of Canada (RDoC) has been advocating for a unified licensure process through several avenues. Firstly, our 2018 national resident survey demonstrated that while only 18.5% of residents plan to locum outside the province/territory of their primary practice, 52% would pursue locum experiences if no additional license applications were required. Secondly, RDoC published a Collaborative Statement on Canadian Portable Locum Licensure in 2017, endorsed by our national partners in medical education. Thirdly, RDoC has advocated for improved physician mobility, and are supportive of the Fast Track and License Portability Agreements proposed by the Federation of Medical Regulatory Authorities of Canada. However, these preliminary agreements do not include residents and do not include new-in-practice physicians who have held an independent license for less than three years.

Conclusions: RDoC's national survey identified residents' desires to practice in jurisdictions outside their primary province/territory. RDoC supports the work of our partners to facilitate a unified or fast-track licensure. This would enrich resident education by facilitating exposure to diverse practice settings and would help address healthcare needs in underserved communities by encouraging resident mobility.

OG1-3-3,60783

Innovations to Extend Scholarly Activities to Medical Students at a Regional Medical Campus

Larry W. Chambers McMaster University, **Seddiq Weera** McMaster University, **Chris Henderson** McMaster University, **Amanda Bell** McMaster University

Background/Purpose: According to CanMEDS, scholarly activity includes "contributing to the creation and dissemination of knowledge and practices applicable to health". Regional medical campuses are an established part of medical education and can promote scholarly activity in their environments. At McMaster University's Niagara Regional Campus (NRC), innovative approaches allow our 84 medical students and 450 faculty to learn about and engage in applied health research, quality improvement of health services and education research.

Summary of innovation: A steering committee facilitates participation of faculty and students in scholarly activities; it collects and summarizes data to support faculty and student scholarly activities; it nurtures research communities of practice; and it connects NRC to resources and individuals at other academic centres. Our research coordinator maintains a list of projects for trainees and faculty during the three-year MD Education Program. These approaches to recruiting, cataloguing and supporting projects began in 2019. In 2018, 2019 and 2020, 33, 60 and 53 projects were available to students, respectively. Projects were supervised by 9, 18 and 24 NRC faculty over each of the three years. In 2018, only 25% (7 of 28) of first year students were involved in projects. Whereas, 100% (28 of 28) and 73% (21 of 28) of first year students were involved in projects in 2019 and 2020, respectively. During 2019 and 2020, 24 peer-reviewed manuscripts and abstracts co-authored by students were published or are in press.

Conclusions: The NRC's innovative approaches can be a model for other regional medical campuses to advance scholarship and reflect local context.

OG1-3-4, 60851

Mixed Messages: A Visual and Textual Analysis of a Rural Medicine Website

Rebecca Malhi University of Calgary, **Douglas Myhre** University of Calgary

Background/Purpose: The mission of Distributed Learning and Rural Initiatives (DLRI), University of Calgary, is to facilitate relationships between "medical educators, healthcare professionals in training, and individuals and families living in rural communities." The current study evaluates the DLRI website to determine whether it accurately reflects our mission and commitment to rural medicine.

Methods: We examined all public-facing webpages that comprise the DLRI website. Text were analyzed for both purpose and content. We also conducted a visual analysis of images on the webpages using techniques derived from art criticism. Specific attention was paid to the subject and context of the images as well as any notable presences or absences.

Results: Thirty-two webpages were analyzed. DLRI's mission was only described explicitly on one webpage. Text on many webpages were procedural with substantial use of jargon. Student pages, in particular, were very directive and often used negative phrases. The visual analysis found that of 23 individual images, 14 of them were rural landscapes with no people. The majority of images containing people showed students, often depicted socializing. Little ethnic diversity was seen in images

Conclusions: Textual analysis of the DLRI webpages indicates a mixture of welcoming and bureaucratic discourse. The visual analysis of the images documented a focus on isolated, de-populated rural landscapes. In addition, there was a notable absence of images of patients, community members, or individuals from diverse backgrounds. The analysis informed recommendations to align the text and images with the DLRI mission and the social accountability mandate of the University of Calgary.

April 20th, 2021 - 11:00 EST

OG2 – 1 Patient Safety

OG2-1-1, 60325

Disclosure: Policy, Practice and Medical Education

Julia Trahey Memorial – University of Newfoundland, **Nicholas Fairbridge** Memorial – University of Newfoundland, **Heidi Coombs-Thorne** Memorial – University of Newfoundland, **Elizabeth Ross** Memorial – University of Newfoundland

Background/Purpose: Transparent communication with patients is expected after harm. In Newfoundland and Labrador, a well-publicized error event prompted education in disclosure communication for physicians and a procedure for disclosure was formalized for each Regional Health Authority in the province. This study was designed to assess the penetrance of educational and policy initiatives to frontline physicians and trainees, and

the openness to trainee involvement in the formal disclosure process.

Methods: A cross-sectional survey was sent to physicians, including trainee physicians, in Newfoundland and Labrador. Focus groups were conducted with physician administrative leaders responsible to lead formal disclosure teams and Quality and Risk Management personnel responsible for institutional disclosure processes and training.

Results: Few clinicians had received education in disclosure. Less than half of respondents were aware of guidelines, legislation or institutional policies relating to disclosure of medical error. Almost all respondents supported trainee involvement in the disclosure process yet procedural resistance and barriers to trainee involvement were documented.

Conclusions: Uptake of disclosure education by physicians and trainees remained low. Education beyond undergraduate training was uncommon, and awareness of institutional policies and procedures was also low. Despite a lack of training, physicians participated in disclosure discussions. Training programs should continue to emphasize disclosure education beyond undergraduate lectures. Institutions have an opportunity in their on-boarding process to familiarize physicians to disclosure policies and procedures. Mentoring residents in disclosure is dependent on Faculty who have the knowledge and skills to do so.

OG2-1-2, 60878

The impact of learner involvement in emergency department patient assessments on short-term return visits: A cross-sectional study

K. Jean Chen University of Ottawa, **Christopher Elliott**, **Tania Fitzpatrick** University of Ottawa

Background/Purpose: Learners, either medical students or residents, often perform the initial assessment of patients visiting the Emergency Department (ED). Their involvement in the ED has been shown to increase patients' length of stay, physicians' time to disposition decision, departments' utilization of imaging and admission rates. It is unclear, however, if learners affect the rate of short-term unscheduled return visits. The objective of this study was to determine if the involvement of learners in ED visits increases the rate of short-term unscheduled return visits.

Methods: This study was a retrospective cross-sectional analysis of ED visit data at a single tertiary care center over a one-year period. Return visits were defined as ED visits presenting within 72 hours of discharge from an initial non-admit ED visit and resulting in an admission on the second visit. The primary outcome was the odds of return visits with and without learners involved during the initial visit. The secondary outcome assessed the interaction of level of training and program on return visits.

Results: Return visits meeting our criteria occurred after 658 (1.3%) of 51,149 encounters involving learners and 701 (0.8%) of 83,310 encounters with no learner involvement (adjusted OR = 1.15, [95% CI 1.03 to 1 .29]). This effect was heterogeneous over learner level of training with no association between clerkship students or senior residents and return visits. However, involvement of post-graduate year (PGY) one (adjusted OR = 1.28, [95% CI 1.09 to 1.50]), PGY2 (adjusted OR = 1.24, [95% CI 1.00 to 1.53]) and PGY3 (adjusted OR = 1.45, [95% CI 1.18 to 1.79]) residents significantly increased the odds of a return visit. Program of study did not independently predict return visits.

Conclusions: This study demonstrated that the involvement of learners, specifically PGY1, PGY2 and PGY3 residents, in ED patient assessments increased the rate of short-term unscheduled return visits. Further work is needed to understand the factors that contribute to this phenomenon.

OG2-1-4, 60313

Unique features of rural generalist to urban specialist consultation: A qualitative study of rural family physicians

Margo Wilson Memorial – University of Newfoundland, **Augustine Joshua Devasahayam** Memorial – University of Newfoundland, **Nathaniel Pollock** Memorial – University of Newfoundland, **Adam Dubrowski** University of Ontario Institute of Technology, **Tia Renouf** Memorial – University of Newfoundland

Background/Purpose: Communication is a key competency for medical education and comprehensive patient care. Several models of teaching communication exist in medical education, but none address rural to urban consultation. The aim of this study was to explore rural physicians' perspectives on consultations with urban specialists to better inform existing communication teaching tools.

Methods: This qualitative study involved semi-structured, one-on-one interviews with rural family physicians (n=11) with varied career stages, geographic regions, and rural community sizes in Newfoundland and Labrador.

Thematic analysis was used to analyze the interview transcripts.

Results: Participants identified features of consultation and referral process that were unique to rural practice and illustrated strategies to improve communication. Four themes specific to communication in rural practice were identified. The themes included: (1) understanding the contexts of rural care; (2) geographic isolation and patient transfer; and (3) respectful discourse; and (4) overcoming communication challenges in referrals and consultations.

Conclusions: Rural physicians see value in conveying the unique aspects of rural practice during communication with urban specialists. Modification of traditional teaching models to convey the rural context, challenges related to patient transfers, and respect for rural expertise may serve to improve the quality and effectiveness of communication between rural and urban settings. Trainees in undergraduate and post-graduate medical education may benefit from opportunities for clinical experience in rural settings, along with enhancements to content about the distinct aspects of rural care.

OG2 – 2 Pot Pourri

OG2-2-1, 60322

International training considerations of Canadian clinician-scientist trainees - a national survey

Adam Pietrobon University of Ottawa, **Charles Yin** Western University, **Derek Chan** University of British Columbia, **Elina Cook** Queen's University, **Tina Marvasti** University of Toronto

Background/Purpose: Canadian clinician-scientist trainees enrolled in dual degree programs often pursue an extended training route following completion of MD and PhD/MSc degrees. However, the proportion, plans, and reasoning of trainees who intend to pursue training internationally following dual degree completion has not been investigated. In this study, we assessed the international training considerations of current clinician-scientist trainees.

Methods: We designed an 11-question survey which was sent out by program directors to all current MD-PhD/MSc program and Clinician Investigator Program trainees. Responses were collected from July 8th, 2019 to August 8th, 2019.

Results: We received a total of 191 responses with representation from every Canadian medical school and both MD-PhD/MSc program and CIP trainees. The majority of trainees are considering completing additional

training outside Canada, most commonly post-doctoral fellowships and/or clinical fellowships. The most common reasons for considering international training include those related to quality and prestige of training programs. In contrast, the most common reasons for considering staying in Canada for additional training are related to personal and ethical reasons. Irrespective of intentions to pursue international training, the majority of trainees ultimately intend to establish a career in Canada.

Conclusions: While most trainees are considering additional training outside of Canada due to prestige and quality of training, the majority of trainees ultimately intend to pursue a career back in Canada. Trainees would likely benefit from improved guidance and mentorship on the value of international training, as well as enhanced support in facilitating cross-border mobility.

OG2-2-2, 60915

Lessons Learned: Setting Up a Large Educational Event on a Shoestring Budget

Malgorzata Kaminska University of Northern British Columbia, **Trina Fyfe** University of Northern British Columbia, **Cirisse Stephen** University of British Columbia, **Lisa Munro** University of Northern British Columbia, **Sonya Kruger** University of Northern British Columbia, **Lindsay Mathews** BC Cancer Agency

Background/Purpose: Want to set up a larger educational event on a limited budget? We use a "Mini Med School" (MMS) event as a case study to provide tricks and tips. The MMS was conceived 30 years ago by a professor who wanted to showcase to the general public the teaching and learning happening at his medical school. Since then, other medical schools and government agencies around the world have created similar series of weekly lectures on basic science and biomedical topics. The costs associated with putting on such event is usually handled by large organizing institutions using internal funds.

Summary of innovation: Despite a lack of internal funding and the small size of our medical program, our team set up a MMS in our rural community. An age and education level diverse group of 59 community members participated in 2 hours of activities during 6 consecutive weeks. Our MMS spiral curriculum featured a variety of teaching methods and environments, regular assessments, and a graduation ceremony. 100% of participants rated the program as engaging, fun, and worth attending again. We attribute our success to the engagement and in-kind donations from our small local medical community. Additionally, we asked and received different forms of support from both private and public

organizations. Lastly, we made judicious use of technology to keep costs in check.

Conclusions: Our experience demonstrates that money is not necessary to put on a large event extravaganza when one uses a bit of creativity, engages the interest of the local medical and public community, utilizes freely available technological resources, and reaches out to local, provincial, and national organizations for support. A low-cost event which feels like, to quote one of our mini-students, "one of the greatest experiences of my life!" is within everyone's reach.

OG2-2-3, 60011

The Good Student or the Good Patient? The Barriers Encountered by Undergraduate Medical Students with Disabilities at the Northern Ontario School of Medicine

Rachel Belanger Northern Ontario School of Medicine, **Elizabeth Levin** Northern Ontario School of Medicine, **Jason Shack** Northern Ontario School of Medicine, **Diana Urajnik** Northern Ontario School of Medicine, **Kathleen Beatty** Northern Ontario School of Medicine

Background/Purpose: The American Association of Medical College's Lived Experience report was released in March 2018 with hopes of broadening the diversity of medical students to include more of those with disabilities (Meeks & Jain, 2018). In response to this publication, we replicated this study with the research question "What are the barriers encountered by undergraduate medical students with disabilities at the Northern Ontario School of Medicine?". The Lived Experience Project provides a unique opportunity to learn about, and compare the experiences of, participants in this study to medical students at the Northern Ontario School of Medicine (Meeks & Jain, 2018). In doing so, the research explored the climate and culture at NOSM and how this affects the treatment and education of students with disabilities, including the barriers they face throughout medical school.

Methods: A qualitative descriptive study design was used. Data was collected using an initial demographics-based survey followed by a semi-structured interview. Interviews were conducted in person or by telephone Data was transcribed and analysed using Braun & Clarke Thematic Analysis (2013).

Conclusions: It was found that the participants identified barriers directly associated with their medical education in addition to barriers indirectly associated with their medical education and finally, barriers outside of medical school.

Conclusions: The barriers encountered by medical students with disabilities at NOSM supported the themes and barriers identified in Meeks and Jain's (2018) Lived Experience Report. Implications for this research include reviews of accommodation policies, revision of technical standards at a national and institutional level as well as strengthened communication between the student, the medical school, faculty, and administration.

OG2-2-4, 60855

There's got to be a better way: Institutional Ethnography of intrapartum practices on a Labour & Delivery unit

Stella Ng St. Michael's Hospital, Unity Health Toronto, **Douglas Campbell** St. Michael's Hospital, Unity Health Toronto, **Filomena Meffe** St. Michael's Hospital, Unity Health Toronto, **Linda Moscovitch** St. Michael's Hospital, Unity Health Toronto, **Sabina Fella** St. Michael's Hospital, Unity Health Toronto, **Nirmala Chandrasekaran** St. Michael's Hospital, Unity Health Toronto, **Ryan Brydges** St. Michael's Hospital, Unity Health Toronto, **Lori Nemoy** St. Michael's Hospital, Unity Health Toronto

Background/Purpose: Labour and delivery (L&D) units can be contested workplaces with tensions between obstetrician, nursing, and midwifery practices. These tensions can impede communication and raise patient safety concerns. Remedying such tensions requires study of the driving forces contributing to these recurrent problems in interprofessional practices.

Methods: Our institutional ethnography study initially used critical incident analysis reports to identify recurrent issues related to transfers of care (TOC) and consultation requests between midwives and obstetricians. We then mapped the work of midwives, nurses, family physicians, and obstetricians by observing (75 hours) and interviewing them (n=15). We also traced work processes to local (forms and hospital policies) and external texts (national policies and evidence-based guidelines). Final analysis made visible the otherwise hidden links between everyday work of L&D practitioners and higher-level coordinators.

Results: We identified three work processes involving midwives consulting obstetricians: induction with TOC back to midwife, consultation without TOC, and TOC. Three points of disjuncture complicated these processes: a local "3 consult rule", linked to higher-level medical-legal governance and remuneration structures; subjective interpretations of the "4cm dilation rule", a policy meant to standardize practice; and regulations that delayed timing of consultations.

Conclusions: Our study extends existing research demonstrating that medicine-driven governance of

midwifery practices can perpetuate interprofessional challenges. For example, the "3 consult rule" was established for patient safety purposes, but in practice can actually function to delay and disrupt work processes, potentially compromising patient safety. While practitioners spoke of the three points of disjuncture as 'laws', most also viewed them as ostensibly modifiable.

OG2 – 3 Assessment Validity

OG2-3-1, 59500

Learner Handover - Who is it really for?

Susan Humphrey-Murto University of Ottawa, **Shiphra Ginsburg** University of Toronto, **Lorelei Lingard** Western University, **Christopher Watling** Western University, **Kori LaDonna** University of Ottawa, **Lara Varpio** Uniformed Services University of the Health Sciences

Background/Purpose: Learner handover, is the sharing of information about learners between faculty supervisors. Learner handover can support longitudinal assessment in rotation-based systems, but concerns have been raised regarding the potential for it to bias future assessments or to stigmatize struggling learners. Because successful implementation relies on a better understanding of existing practices and beliefs, the purpose of this study was to explore how faculty perceive and enact learner handover in the workplace.

Methods: Using constructivist grounded theory, 23 semi-structured interviews were conducted with faculty from two universities. Participants were asked to describe their learner handover practices, including learner handover that was delivered or received about resident and student trainees either within or between clinical rotations. We probed to understand why it was used by faculty, and its perceived benefits and risks.

Results: Learner handover occurs both formally and informally and serves multiple purposes for learners and faculty. While participants reported that learner handover was motivated by both learner benefit and patient safety, they primarily described motivations focused on their own needs. Learner handover was used to improve faculty efficiency by focusing teaching and feedback, and it was perceived as a "self-defence mechanism" when faculty were uncertain about a learner's competence and trustworthiness. Informal learner handover also served social or therapeutic purposes when faculty used it to gossip, vent, or manage insecurities about their assessment of learner performance. Because of its multiple, sometimes unsanctioned purposes, participants

advised being reflective about the motivation behind learner handover conversations.

Conclusions: Learners are not the only potential beneficiaries of learner handover; faculty use learner handover to lessen insecurities surrounding entrustment and assessment of learners and to openly share their frustrations. The latter created tensions for faculty needing to share stresses, but wanting to act professionally. Formal education policies regarding learner handover should consider faculty perspectives.

OG2-3-2, 60785

Gathering Evidence of Validity for a Therapeutics Decision-Making (TDM) Examination for Assessing International Medical Graduates

Fang Tian Medical Council of Canada, **Marguerite Roy** Medical Council of Canada, **André De Champlain** Medical Council of Canada, **Claire Touchie** Medical Council of Canada, **Brent Kvern** The College of Family Physicians of Canada, **Jon Witt** University of Saskatchewan

Background/Purpose: The TDM Exam is one of the tools used by Pan-Canadian Practice-Ready Assessment (PRA) programs for selecting international medical graduates (IMGs) into over-time clinical assessment to determine their readiness to enter independent practice in Canada. It assesses the application of therapeutics knowledge and decision-making skills in the pharmacological and non-pharmacological management of medical conditions at the level required of family physicians (FM) practicing independently and safely in Canada. This study assesses whether the TDM Exam measures therapeutics knowledge and skills at its intended level by comparing the performances of PRA applicants and a sample of Postgraduate Year 2 (PGY2) FM residents.

Methods: The study included 90 PRA applicants as the control group and 17 PGY2 FM residents as the experimental group. Both took the TDM Exam in January 2020 and their responses were marked by the same physician markers who were blind to examinee group membership. The analyses included independent samples t-test and chi-square to compare total score means and pass/fail status between the two groups, and a multi-variate analysis of variance to compare their performances on sub-scores.

Results: There's no statistically significant difference in mean scores or pass rate between the two groups. They performed similarly on all sub-areas except for one dimension (i.e., Acute Illness).

Conclusions: This study provided preliminary evidence to support the use of the TDM Exam for its intended purpose as one of the tools for selecting IMGs who would likely succeed into PRA programs. A follow-up study will include more PGY2 residents.

OG2-3-4, 60796

Assessment in Continuing Professional Development: What does it look like?

Mélanie Marceau Université de Sherbrooke, **Élise Vachon-Lachiver** Université de Sherbrooke, **Danika Lambert** Bishop's University, **Julianne Daoust** Université de Sherbrooke, **Marie-France Langlois** Université de Sherbrooke, **Meghan McConnell** University of Ottawa, **Aliki Thomas** McGill, **Christina St-Onge** Université de Sherbrooke

Background/Purpose: Continuing professional development (CPD) is an essential component of health professionals' practice. CPD contributes to professionals' development and maintenance of competence within evolving contexts of care. While assessment could be used in CPD to ascertain participants' learning, its use is rare or irregular. The aim of this study was to document the breadth and depth of what is known about the development and implementation of assessment practices within CPD.

Methods: We conducted a scoping review based on Arksey and O'Malley's methodology. Two team members reviewed all abstracts with a 90% inter-rater agreement. When needed, other members provided a third opinion. A data extraction form was developed. We conducted a descriptive analysis for numerical data (e.g. year of publication) and thematic analysis of qualitative data (e.g. assessment format, timing of assessment).

Results: The search strategy was conducted in six databases and included terms such as lifelong learning and professional development. Of the 1733 abstracts identified, 136 were retained for the full review. We included papers that assessed health professionals in a CPD context. The majority of studies used a written exam (75%) over a performance-based assessment. Multiple-choice exams were most common (62%). Barriers identified include resources required to develop assessments and time pressure on learners to complete assessment. Facilitators identified were related to a positive perception of the assessment from the learner's perspectives.

Conclusions: While assessment drives learning in the context of health professions training programs, it may not have the same purpose or influence on learning with practicing professionals, particularly when the assessment does not have a summative value.

April 20th, 2021 - 12:00 EST
OG3 – 1 Faculty Development

OG3-1-1, 60816

Gender-affirming care for trans and non-binary youth: Lessons for Canadian medical education from Trans Youth CAN!

Arati Mokashi IWK Health Centre, **Julie Temple Newhook** Memorial – University of Newfoundland, **Sandra Gotovac** Western University, **Gagandeep Singh** University of Toronto, **Natasha Johnson** McMaster University, **Robert Stein** Western University, **Margaret Lawson** Children's Hospital of Eastern Ontario (CHEO), **Bob Couch** University of Alberta, **Greta Bauer** Western University

Background/Purpose: Referrals of trans youth for gender-affirming care have increased internationally. Trans Youth CAN! is a prospective 24-month cohort study of youth referred for puberty suppression/gender-affirming hormones, medical, social, and family outcomes.

Methods: Eligible participants were aged <16, new to puberty blockers/hormones, and enrolled at first appointment for gender-affirming medication, along with their parent/caregiver (P/C), from 10 Canadian gender clinics. Baseline sociodemographic, health, pathways to care, and family data were collected from interviewer-assisted youth surveys, self-completed P/C surveys, and medical records from 09/2017 to 06/2019.

Results: 174 youth (75.8% trans males, 15.9% trans females, 8.3% non-binary), and 160 P/Cs (85.1% female, 96.1% birth/adoptive parents) were enrolled. Most common youth comorbid diagnoses were anxiety (40.2%) and depression (32.0%). Family doctors or pediatricians were first providers seen to discuss blockers or hormones by 58.9% of youth, and accounted for 68.8% of clinic referrals. Before coming to clinic, 41.0% of youth saw non-clinical community stakeholders (school counsellors, community groups) regarding their gender. On average, youth spent 13.5 months seeking hormone care, waited 8.7 months from referral to first medical appointment, and saw 2.7 different types of providers (maximum 8) before coming to clinic.

Conclusions: There is a need to expand healthcare capacity for trans youth in Canada, including hormone care and community support. Comprehensive education in gender-affirming care during training programs will empower primary care providers and pediatricians to ease distress of gender dysphoria, empower trans and non-

binary youth, and support positive mental and physical health.

OG3-1-2, 60504

Experiences of diversity and inclusion in medical school orientation: A Qualitative Study

Wid Yaseen University of Toronto, **Asia van Buuren** University of Toronto, **Paula Veinot** Independent research consultant, **Maria Mylopoulos** University of Toronto, **Marcus Law** University of Toronto

Background/Purpose: There is increasing effort among medical schools to recruit a diverse student body. However, there is a paucity of research into the unique experiences of students with diverse backgrounds during their transition to medicine. This study explored how experiences during medical school orientation influence students' transition into the medical profession.

Methods: Between April and August 2019, 16 first-year Canadian medical students completed audio-recorded semi-structured interviews. Interviews explored how issues of diversity and inclusion during orientation affected students' transition into medicine and their professional identity development. Interviews were transcribed and analyzed for common themes using descriptive analysis.

Results: Participants described orientation as essential to the curriculum. They highlighted the importance of the social orientation during their transition into medical school and noted experiencing complex social pressures during this time. Participants were introduced to the dominant medical professional identity during orientation. While participants noted a number of tensions, many of which revolved around the dominant identity as related to? their past, present and future selves, such tensions were salient for students from diverse backgrounds.

Conclusions: Longstanding issues of diversity and inclusion in medicine manifest from day one of medical school. While orientation may be seen as a student-run week to welcome students into the profession, it is a crucial period for medical schools to properly set the stage to intentionally demonstrate its commitment to an inclusive culture and meaningful professional identity development. To wait to address these issues later in the school year is too late.

OG3-1-3, 60625

Using case-based learning to teach biopsychosocial complexity and adaptive expertise to third-year psychiatry residents

Sacha Agrawal University of Toronto, **Maria Mylopoulos** University of Toronto

Background/Purpose: Supporting the recovery of individuals with severe and persistent mental illness (SPMI) requires clinicians to flexibly apply a diverse set of knowledges ranging from neuroscience through psychodynamic theory to issues of stigma and racism. While some of this work is routine, much of it occurs in the grey zones of practice, where empirical evidence offers few directives and clinicians must therefore innovate solutions to complex problems. Theories of adaptive expertise emphasize the need for practitioners to learn to both efficiently apply known solutions to known problems as well as generate novel solutions to novel problems by acquiring both factual (what?) and mechanistic (why?) information in training (Mylopoulos et al. Med Teach 2018). Adaptive expertise thus offers a helpful framework for teaching in the SPMI context.

Summary of innovation: We developed a series of case-based learning (CBL) tutorials, designed to foster adaptive expertise, to serve as the curriculum for the 3-month PGY3 SPMI block in our residency program. Nine fictional cases were developed in collaboration with 17 content experts and iteratively improved over the past and current academic years with a total of 53 resident participants and 4 tutors. The learning objectives span both medical and non-medical CanMEDS roles. Residents meet weekly in small groups with their tutor, applying prior knowledge to build a tentative understanding of the issues in each case, and, after reading the provided resources, they return the following week to discuss the case again, filling in knowledge gaps. Tutors promote the residents' capabilities as future experts by posing both 'what' and 'why' questions and encouraging them to wrestle with areas of uncertainty and ambiguity.

Conclusions: While there are few examples in the literature of case-based learning in postgraduate medical education, our experience to date suggests that CBL is a highly feasible way of engaging residents in learning about and through complexity, while supporting their development as adaptive experts.

OG3-1-4, 60839

Paediatric Project ECHO® for Complex Care: A Virtual Education Model to Support Community Management of Children with Medical Complexity

Catherine Diskin The Hospital for Sick Children, **Eyal Cohen** The Hospital for Sick Children, **Amos Hundert** The Hospital for Sick Children, **Annie Jiwan** The Hospital for Sick Children, **Senthoori Sivarajah** The Hospital for Sick Children, **Alyssa Gumapac** The Hospital for Sick Children, **Jennifer Stinson** The Hospital for Sick Children, **Chitra Lalloo** The Hospital for Sick Children, **Michelle Ho** The Hospital for Sick Children, **Julia Orkin** The Hospital for Sick Children, **Jo-Ann Osei-Twum** The Hospital for Sick Children

Background/Purpose: The Project ECHO® model (didactic and case-based learning), originally designed for adult settings, was adapted to offer evidence-based mentorship to community healthcare providers (HCPs) caring for children with medical complexity (CMC). Paediatric Project ECHO® for Complex Care is the first ECHO® program dedicated to CMC. This study assessed the performance-related outcomes of this ECHO® program.

Methods: Interprofessional HCPs who attended >1 monthly virtual ECHO® session, between January 2018 and December 2019, were eligible for this study. This prospective mixed-methods study assessed acceptability, knowledge, self-efficacy, and practice-level impacts. Using REDCap, surveys were administered at baseline and 6-months. Surveys used 7-point Likert scales (quantitative data) and open-text fields (qualitative data), and descriptive and inferential data analyses were conducted. The study received ethics approval from the Hospital for Sick Children.

Results: Participants represented over 10 health professions and reported moderate-to-high program acceptability, with acceptability scores ranging from 5.0 ±1.1 to 6.4 ±0.6 at 6-months (n = 27). Self-reported knowledge and self-efficacy increased across all probed topics and skills (p-values ranged from <0.001 to 0.006). Most participants perceived a 'positive' or 'very positive' impact on clinical practice, including an enhanced ability to provide quality care to CMC (n = 20, 74%).

Conclusions: Paediatric Project ECHO® for Complex Care has demonstrated acceptability and satisfaction among interprofessional community HCPs who care for CMC. HCPs report improved knowledge, self-efficacy and positive practice impacts following program participation. We suggest that ECHO® is a worthwhile educational model to support community-based care of CMC.

OG3 – 2 Wellness & Health Advocacy

OG3-2-1, 60925

Little 'a' advocacy: A novel workshop experience to teach skills in health advocacy

Shazeen Suleman University of Toronto, **Kimberly Young** University of Toronto, **Kimberly Young** University of Toronto

Background: Health advocacy is a core physician, resident, and student competency as per the CanMEDS framework. However, it remains a nebulous concept in competence-by-design (CBD) medical education, from action at the patient level to structural barriers. Learners and educators alike may struggle to teach and learn health advocacy using traditional pedagogical methods. Purpose: To teach undergraduate medical students an approach to health advocacy at the patient and societal level, using applied case-based learning (CBL).

Summary of Innovation: Using a socio-ecological model to define health advocacy from the interpersonal (little 'a') to the structural (big 'A') level, a 90-minute workshop was created. Following a brief lecture, students worked through realistic cases in small groups, followed by large-group debriefing. All students completed a pre- and post-questionnaire exploring their own definitions of advocacy, perceived importance of health advocacy, and their own skill level in being a health advocate. Results: 81 medical students participated in this workshop. Nearly all believed it was important for them to be a health advocate, while only 59% believed they had the necessary skills. After participating, 89% reported they had the skills to be a health advocate (p<0.05). Students rated the workshop extremely favourably (3.67/4), with some even stating it should be a mandatory component of medical curriculum.

Conclusions: We demonstrate a novel, interesting, and effective way to teach skills in health advocacy at the interpersonal level using case-based learning. This may represent a reproducible method of teaching skills in advocacy at other faculties.

OG3-2-2, 60508

Exploring Patient Mistreatment of Medical Trainees

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Background/Purpose: Mistreatment is defined as the intentional or unintentional behavior that shows disrespect for the dignity of others and unreasonably interferes with the learning process. Patient mistreatment of medical trainees is not well described in the literature. We sought to determine whether patient mistreatment of

medical trainees occurs and how trainees manage these experiences. Our goal was to provide insights that can shape institutional responses to trainee mistreatment by patients

Methods: Qualitative semi-structured interviews of medical students at a large medical school in North America were conducted using a constructivist grounded theory approach. Interviews were audio recorded, transcribed, and de-identified. Two separate researchers coded the transcripts iteratively for themes and theoretical categories

Results: Ten trainees (mean age 25, 70% male, 80% visible minority) participated in the pilot study. Eight trainees had personally experienced patient mistreatment and two had witnessed patient mistreatment of another trainee. Trainees described being mistreated based on gender and ethnicity, and physical harm was threatened in two cases. All were aware of the institution's official reporting mechanism for mistreatment. Patient screening, patient education, resident/attending advocacy, modelling professional responses, and debriefing were all identified as helpful responses and prevention strategies

Conclusions: Patient mistreatment of medical trainees in this data occurred and often it was women and visible minorities who were targeted. Medical schools must proactively structure mechanisms to support trainees who experience patient mistreatment

OG3-2-3, 60567

Placing the Patient at the Centre of the Learning Environment: Effect on Agency for the Learner, the Attending Physician and the Patient

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Background/Purpose: Although much has been written about the medical learning environment, the patient, who is the focus of our care, has been systematically excluded from this discourse. The purpose of this study was to explore the role of the patient as an active participant with agency in an authentic medical learning environment from the standpoint of the learner, the faculty and most importantly the patient. We hoped to gain insight into the

reinforcement of positive professional values such as patient-centred behaviours and a respectful environment.

Methods: The study recruited participants to adopt a "patient-centered" clinic approach where case presentations were conducted in examination rooms with the patient. After each visit, participants took part in semi-structured interviews to explore the impact of the patient-present learning environment. We recruited 34 participants; 10 attending physicians, 12 learners, 10 patients and 2 family members. We analyzed the data deductively using a conceptual framework of agency.

Results: Results revealed three themes: 1. The teaching model allowed for a more patient-centered and inclusive health care environment from the patient perspective; 2. Attending physicians and medical trainees reported that presenting cases with the patient present challenged normal teaching practices and were differed on whether it supported a more inclusive health care environment; 3. There was a hidden curriculum of performance-based view of professional behaviour.

Conclusions: Patient-present teaching engaged patients and enhanced their agency by recasting the patient as the central focus within the healthcare encounter. We identified a tension between performing and learning. This study adds new insights to the concept of patient centredness and professionalism in the medical learning environment.

OG3-2-4, 60930

Walking Learners: Enhancing Wellness without Impacting Performance

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Background/Purpose: Using walking workstations in non-medical educational and work settings shows improvement in cognitive abilities. Meanwhile, worldwide, many medical learners do not meet exercise guidelines. We investigated the boundaries of improved cognitive performance with physical activity using real-life tasks in participants having varying medical knowledge and experience. We hypothesized that, irrespective of expertise level, physical activity bolsters diagnostic performance.

Methods: 30 family medicine residents (FMRs), 31 medical students (MS) and 31 psychology students (PS), all in their Year 2 of studies were equally and randomly assigned desk-sitting or treadmill-walking. Following

training slides showing a representative picture and brief description of 4 skin conditions, participants named skin conditions shown in 20 different pictures distributed among those previously studied.

Results: A mixed 2-way 2x3 ANOVA with Expertise and Exercise as factors found a main effect for Expertise, $F(2,85)=3.51$, $p=.034$. Bonferroni post-hoc tests revealed the difference in number of correct answers was significant between PS and FMRs ($p=.032$), while no significant differences were found between PS and MS ($p=.320$) nor MS and FMRs ($p=.944$). No main effect was found for Exercise, $F(1,85)=0.57$, $p=.453$ nor interaction effect, $F(2,85)=0.01$, $p=.986$.

Conclusions: While an expertise effect exists, more interestingly -- perhaps counterintuitively for some -- walking did not decrease performance at any expertise level during this complex task requiring problem-solving and short-term recall. When combined with studies showing that treadmill-walking reduces task stress and boredom while increasing arousal and mood, our study suggests a way to promote and enhance wellness during work hours without impacting medical learners' performance.

OG3 – 3 Teaching & Learning - Methods

OG3-3-1, 60551

Intersectionality in Medical Education: A Meta-Narrative Review

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Background/Purpose: There is significant focus on improving equity, diversity and inclusion (EDI) in academic medicine, however, little attention is given to understand inequity from an intersectional perspective. Intersectionality is a theoretical framework and methodology that refers to the study of the dynamic nature of social categories with which an individual identifies. Although intersectionality provides a useful framework for both research and practice, a better understanding regarding how it has been applied in a medical education context may inform future efforts to advance social justice. We sought to explore how and why intersectionality has been conceptualized and applied in the context of medical education.

Methods: We employed a meta-narrative synthesis to review existing literature on intersectionality theory and intersectional methodologies and frameworks in medical education. Three electronic databases were searched using key terms yielding 40 articles. After title, abstract, and full-text screening 28 articles were chosen for inclusion. Analysis of articles sought a meaningful synthesis of intersectional theory in relation to research methodology and/or framework, and application of intersectionality theory to medical education.

Results: Existing literature on intersectionality reveals distinct meta-narratives regarding whether intersectionality refers to theory or praxis. There are contrasting narratives on the suitability of quantitative intersectional methodologies and limited consensus on the practical application of intersectionality to medical education.

Conclusions: The potential for intersectionality to improve equity in academic medicine remains constrained by tension between intersectionality as theory and intersectionality as praxis. Drawing explicit attention to the distinction between both meta-narratives may foster complementary and integrative approaches to understanding and applying intersectionality in a medical education context.

OG3-3-2, 60689

Reflexivi-Tool: Development of a Practical Tool for Fostering Reflexivity in Family Medicine

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Background/Purpose: In the last decade, reflexivity has emerged as a key concept in family medicine as evidenced by its increasing integration in competency statements and frameworks in the field. However, the growing variety of terms and definitions related to reflexivity have caused vagueness and hindered the concept's full application in training and professional practice. This project aimed to develop an educational tool to support the learning and teaching of reflexivity in family medicine.

Summary of innovation: The development of the tool is based on a systematic approach to educational design comprising five stages of development. The format and content of the tool were designed based on a needs assessment of clinical teachers affiliated with the Family Medicine Residency Program at Université Laval (Canada), as well as a rapid review on reflexivity in family medicine. The tool was disseminated in the 12 family medicine teaching clinics of the Université Laval network and then evaluated six months later using a survey among clinical teachers. Results: "Reflexivi-Tool" presents four types of

reflexivity (i.e. clinical, professional, relational, and socially responsible) in a concise way with related definitions, goals, processes, and sample question prompts for each reflexivity type. Our follow-up survey shows that Reflexivi-Tool is well appreciated by those using it, with a moderate uptake rate (46.1%) in the residency program.

Results: Tools such as Reflexivi-Tool are crucial for supporting reflexive processes that target different aspects of professionalism, allowing not only improved clinical judgement and continued learning, but also a sense of social responsibility and moral commitment among practitioners.

OG3-3-3, 60004

The Prism Model: Advancing a theory of practice for arts and humanities in medical education

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Background/Purpose: The arts and humanities (A&H) have transformative potential for medical education. However, questions persist about whether the A&H are being effectively employed. A recent scoping review described patterns and gaps in the published literature, and revealed the need for additional analytical work to integrate existing knowledge into a theory of practice for the field. This research aims to provide such analysis, in order that the A&H can realize their transformative potential in medical education.

Methods: Additional analyses were conducted on the records collected during the 2019 scoping review addressing the question: how and why are the A&H used to educate physician and interprofessional learners across the developmental spectrum? We report the results of discursive and conceptual analyses of 769 citations included in that review, as well as 15 stakeholder interviews.

Results: The literature positioned the A&H as additive to medicine, and nearly half the records focused on their use for mastering skills and/or perspective taking. Drawing largely on the conceptual results, we propose an emerging theory of practice--the Prism Model of four functions (mastering skills, perspective taking, personal insight and social advocacy)--to support more strategic and robust use of A&H in medical education.

Conclusions: The A&H are not currently actualizing their potential in medical education. Relevant across sub-fields and applicable to all learning domains, the Prism Model offers a foundation for shared language within the field. The findings offer an approach to A&H teaching that includes greater pedagogical flexibility and precision, thus maximizing the transformative potential of A&H in medical education.

OG3-3-4, 60746

Definitions and conceptualisations of context of healthcare professionals: A scoping review

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Background/Purpose: The context in which healthcare professionals (HCP) practice is believed to influence enactment of competencies. Context is broadly defined as the range of affordances and constraints that collectively define situations that structure social practices. Despite existing literature on the impact of context on competency, the nature and role of contextual characteristics and how context is measured are poorly understood. The objectives are to map the breadth and depth of the literature on 1) how context is conceptualized and defined; 2) the contextual factors that may influence professional competencies, and 3) how context is measured in the health professions literature.

Methods: We conducted a scoping review based on Arksey & O'Malley's framework. We comprehensively searched MEDLINE and CINAHL with a date range from 2000 to 2019. To be included in the review, studies had to report on: context; relationships between contextual factors and professional competencies; or measure context of HCP. We extracted data on context definitions, contextual factors influencing competencies, context measures, and their psychometric properties. We performed numerical and thematic analyses.

Results: Of the 8530 articles, 297 were included for review. We identified 25 contextual factors organized into 6 themes: organization, extra-organization, social environment, leadership, physical infrastructure and resources, and client features (e.g. client characteristics, client interactions). We compiled a list of 67 context definitions and 112 available measures, some with psychometric properties other without.

Conclusions: The findings highlight which contextual factors may influence the enactment of professional

competencies and point to areas that may be targeted in HCP education and continuing professional development.

April 20th, 2021 - 15:30 EST
OH1 – 1 CPD COVID

OH1-1-1, 60791

COVID Corner - Changing Continuing Professional Development in Response to Crisis

Dana Young University of Calgary, **Chloe Burnett** University of Calgary, **Rosario Villalobos-Gonzalez** University of Calgary, **Caitlin Ryan** University of Calgary, **Alanna Wall** University of Calgary, **Susan Limongiello** University of Calgary, **Elaine Chow Baker** University of Calgary, **Kelly W. Burak** University of Calgary

Background/Purpose: The COVID-19 pandemic challenges all aspects of continuing professional development (CPD). How can we rapidly meet education needs of overwhelmed clinicians? After running two COVID-19 updates webinars in mid March / early April, the University of Calgary CME&PD Office transformed our approach to dissemination of information, offering an ongoing program called COVID Corner.

Summary of innovation: COVID Corner is a free Wednesday evening webinar series, on the Zoom platform, providing updates and explorations of various healthcare areas affected by the pandemic in Alberta. The planning committee selected topics with a just-in-time approach, co-developed sessions with local experts, to address the current situation and long-term impact of the pandemic. Each webinar includes co-presentations from a broad range of subject matter experts, followed by a moderated panel conversation, promoting shared learning across professions. To sustain this program, we obtained funding from key stakeholders, as well as continuously received individual donations. COVID Corner became a trusted brand of CPD programming delivering 14 sessions to date. It has attracted over 100 local presenters /panelists, and 9000 registrations, including 10% from outside of Alberta.

Conclusions: The extreme context of the pandemic reinforces some key factors: impactful education should be linked to the local delivery of healthcare; stakeholder organizations and clinicians should share responsibility for the learning to create community of practice. COVID Corner's success resides in our adaptability, revising our traditional understanding of CPD events, to support our healthcare workforce in developing individual and collective resilience during these extraordinary times.

OH1-1-3, 60290

Mission Critical: COVID-19 Virtual Simulation CME for Rural Interprofessional Teams

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Background/Purpose: With COVID-19 onset, Northern Ontario rural physicians and interprofessional teams faced the possibility of providing care to critically ill COVID-19 patients. A sense of rural isolation, paucity of collegial support, and possible knowledge and skills gaps from emerging evidence contributed to individual and collective unease. An immediate educational intervention was needed to allay fears and provide relevant professional development.

Summary of innovation: Within 3 weeks, regional HSC simulation centre staff collaborated with NOSM CEPD on a 2-hour virtual simulation program addressing COVID-19 PPE donning/doffing and airway management. Rural hospital clinical teams enrolled as interprofessional communities of practice. Prior to session, participants reviewed 30-minute training video and equipment list and could submit questions. Sessions were facilitated by regional HSC physician with live video link to rural hospital. Format included procedure presentation; direct observation and coaching participants practicing procedures; Q&A; discussing protocols; reviewing best practice resources. Physicians were eligible for CFPC/RCPSC high level credits. Program evaluation included: participant survey capturing feedback, learning reflection and implementation plans; facilitator debriefs; rural site lead interviews; review of reinforcing resources.

Conclusions: Addressing community-specific needs resulted in changes to ER protocols and procedures; acquiring COVID-19 related equipment to optimize care; and local education. Program enhanced regional support networks. By providing a port in the storm to support rural physicians and healthcare teams, education reduced clinical anxiety due to COVID-19's evolving threat. Key informant interviews outlined impact for each community-of-practice informing on-going CME needs.

OH1-1-4, 60537

ALONG CAME COVID: LESSONS LEARNED AS A LONGITUDINAL INSTRUCTIONAL DEVELOPMENT PROGRAM WENT VIRTUAL

Umberin Najeeb University of Toronto, **Danny Panisko** University of Toronto

Background/Purpose: The Master Teacher Program is the University of Toronto, Department of Medicine's 2-year certificate course which provides advanced training for clinician-teachers to enhance their teaching effectiveness. With the COVID-19 pandemic, university regulations based on public health policy did not allow for large gatherings, so the program urgently needed to go virtual.

Summary of innovation: Course Directors contended with four thematic decisions to enable this: 1) "To Pause or To Continue": There was a sense of responsibility toward participants who expected to advance their teaching skills and provide evidence of teaching scholarship to their academic leaders. 2) "To Use or Not to Use": A virtual platform was optimized based on cost, availability, administrative support, and technical/educational features. 3) "To Have or Not to Have": Content delivery and instructional design were impacted in a virtual format. Interactivity needed to be maintained. 4) "To do or Not to do": The usual class format, including a brief collaborative reflective discussion of participants' recent teaching experiences, was modified to share personal experiences/reflections in a challenging time.

Conclusions: Five key messages emerged for faculty developers engaged in longitudinal virtual curriculum delivery and teaching: 1) Be humble: acknowledge limitations for both teachers and learners. 2) Be flexible: adapt teaching methodologies, instructional design, and modify curriculum. 3) Be collaborative: involve learners in curriculum planning and virtual session structure. 4) Be responsible: cancellations impact learners, ongoing learning is vital. 5) Be nurturing: a virtual faculty development community is a supportive environment for learning, teaching, and educational practice in a challenging time.

OH1-1-2, 60622

The COVID CPD Landscape: Market Research and Insights for Planning Programmatic Offerings

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Background/Purpose: The COVID Pandemic forced CPD offices to begin to enact the recommendations of The Future of Medical Education in Canada- CPD (FMEC-CPD; Campbell & Sisler, 2019). In a rapid series of events stemming from the inability to hold in-person programming, CPD offices hurriedly transitioned to an online paradigm, well outside their comfort zone. This study is a chronicle of one office's lessons learned.

Methods: This mixed-methods market research and program evaluation consolidates a program of anonymous surveys taking place pre/post program (15 webinars/6 asynchronous modules) CPD offerings totaling 2784 respondents at Queen's University. The surveys asked Likert, demographic (age, gender, practice location, health profession), and market research open-ended questions relating to learner preference, comfort, knowledge gain, barriers to practice, and intent to change metrics. These were analyzed thematically using ATLAS.ti and using inferential statistics (SPSS).

Results: Our thematic findings show learners increasingly adapting to online learning. Learners reported preferring asynchronous as compared to the same duration of online synchronous learning. The analyses of pre-post responses showed that asynchronous offerings resulted in greater change metrics than asynchronous programing. Learners across professions tended to select programs with similar reasoning: upfront topic relevance, involving a member my profession, time-conservative, and reacting badly to biased or non-compelling speakers and topics.

Conclusions: CPD offices must continue to learn from their successes and failures and we will need to decide whether we will be biding our time to return to in-person primary programming or elect to embrace the possibilities afforded to us by the pandemic-shifted paradigm.

OH1 – 2 Teaching & Learning

OH1-2-1, 60566

Going against the grain: an exploration of learner agency in medical education

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Background/Purpose: Self-directed learning relies on learner agency. While attractive in principle, the actual exercise of agency is a complicated process, potentially constrained by social norms and cultural expectations. In this study, we explored what it means to be an agentic learner in medicine, and how individuals experience and harness agency in their learning.

Methods: Using a constructivist grounded theory approach, we interviewed 19 physicians or physicians-in-training who identified as 'learning mavericks'; this strategy facilitated recruiting participants with a strong sense of themselves as agentic learners. We asked them about atypical learning choices they had made, about support and resistance they encountered, and about how they managed to carve a distinct path for themselves. Data collection and analysis were concurrent and iterative, grounded in the constant comparative approach.

Results: We identified one overarching idea: agency is work. The work of exercising agency was compounded by a system of professional training that was perceived to promote conformity and to resist individual learner agency. Individuals' capacity to exercise agency appeared to be bolstered by social capital, self-knowledge, and mentorship.

Conclusions: Our work extends the understanding of learner agency in medicine, and highlights that the exercise of agency is often a counter-cultural act that requires learners to resist pressure to conform to social and professional expectations. Agency may come more easily to strong learners who have established their ability to succeed within the system's expectations. Enhancing learner agency thus requires careful attention to learner support to facilitate the work that agency demands.

OH1-2-2, 60612

Residents as Teachers in the Ambulatory Setting: a possible solution for fragmented learning?

Cary Cuncic University of British Columbia, **James Tessaro** University of British Columbia, **Harp Nagi** University of British Columbia, **Aman Nijjar** University of British Columbia

Background/Purpose: Historically, medical students have learned internal medicine on well-established inpatient clinical teaching units, including significant learning from residents. In contrast, teaching medical students in the outpatient setting is less well-described but just as necessary, given the scope of ambulatory care. Our undergraduate ambulatory structure had relied on a clinical preceptors volunteering for half days when they were able, resulting in a fragmented curriculum for students.

Summary of innovation: We created a "junior attending" rotation where a PGY-4/5 resident was added to the third year medical students' 2-week internal medicine ambulatory rotation. Nine residents completed this 4 week rotation between February 2018-June 2019. They provided the bulk of teaching and clinical supervision to the students. Two clinical faculty members served as the preceptors. Patients were given a "Who is my Doctor" handout to describe the structure of the teaching clinic. Semi-structured interviews were conducted with both preceptors, all nine fellows, and 13 medical student focus groups. Interviews were analyzed in an iterative manner to explore the educational implications.

Conclusions: The major themes identified emerging from the initial analysis of the interviews included: 1) increased time, focus and individualized attention to the students' learning than compared to the inpatient setting, 2) unique teaching and feedback skills acquired by the residents 3) increased job satisfaction for faculty preceptors 4) creation of a supportive learning environment for all. We propose that the junior attending role be expanded from the inpatient clinical teaching unit to the ambulatory setting given the benefits to all stakeholders.

OH1-2-3, 60154

Flexing Creative Muscles in Medical School.

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Background/Purpose: FLEX is a multi-year course at UBC that promotes personalized clinical/basic science research and educational scholarship for medical students. Offering arts/humanities FLEX projects, however, provides

students with an alternative, but no less important, scholarly opportunity. At the onset of the COVID19 lockdown, I advertised a general FLEX ARTS opportunity. Three students signed up and created two very different projects.

Summary of innovation: • Two students working together composed and produced an album containing 12 original pieces of music that explored their responses (both adaptive and introspective) to the COVID lockdown and isolation. The album, including detailed liner notes, was posted to Bandcamp.com and received 2200 streams. Subsequently, they were invited to an interview with the CBC host of "Q", a national arts magazine show. • One student explored the ramifications of contemporary pandemic movies, through a medical/public health, as well as a film studies lens. Her richly reflective essay, informed by an extensive literature review, was subsequently published in the national online "CMAJ Blogs".

Conclusions: In contrast to educational innovations with a defined intervention, these FLEX ARTS projects involved a metaphorical space where students could exercise their creative scholarship. The students conceived of and implemented their own projects. They required only regular check-ins and a sounding board, off which to bounce their thoughts, progress, and in the case of written work, a willingness to read and edit drafts. What I learned as faculty was that medical students benefit from encouragement to apply their research skills broadly, and with an aim for creative and scholarly growth.

OH1-2-4, 60582

Exploring Residents' Perspectives of Competency-Based Medical Education Across Canada

Vivesh Patel Queen's University, **Heather Braund** Queen's University, **Stephen Mann** Queen's University, **Nancy Dalgarno** Queen's University

Background/Purpose: Despite the implementation of Competence by Design (CBD) within Canadian residency programs, little is known about how residents perceive competency-based medical education (CBME), even though they are greatly affected. This study examined Canadian residents' perceptions of CBME.

Methods: An online survey including Likert-type items and open-ended questions was administered to residents across Canada. 105 residents enrolled in a CBD program and 270 residents enrolled in a traditional ("pre-CBME") program responded to the survey. Quantitative data were analyzed in SPSS using the Mann-Whitney test and qualitative data were analyzed thematically using NVivo.

Results: Three themes emerged: program outcome concerns, changes, and emotional responses. Residents in both groups were concerned about administrative burden, assessment challenges and feedback quality. The pre-CBME group had greater concerns that faculty time constraints will affect assessment completion (Mean = 4.13) than residents in CBME (Mean = 3.91), U = 11663.50, z = -2.88, p = 0.004, r = -0.14. Pre-CBME residents (Mean = 3.46) generally agreed more that faculty would spend greater time administering CBME than on learning experiences than residents in CBME programs (Mean = 2.91), U =9705.50, z = -1.095, p = .000, r = -0.26. Residents enrolled in CBME reported increased self-reflection and proactiveness in their own learning. Both groups expressed strong emotional responses (e.g. stress and frustration).

Conclusions: Residents across Canada have mixed feelings and experiences regarding CBME. Although residents perceive they are more self-directed learners as a result of CBME, the results suggest that programs will need to address specific challenges to increase stakeholder buy-in and attend to well-being.

OH1-2-5, 59954

A Target Population Derived Method for Establishing Radiograph Interpretation Competency

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Background/Purpose: Clinical skills competency standards are often developed in an ad hoc method, with a poorly delineated connection to the target clinical population. Using pediatric musculoskeletal (MSK) radiograph interpretation as an example, we inserted the Ebel criterion-referenced method into an end-to-end standard setting procedure to derive a performance-based standard.

Methods: This was a multi-center prospective mixed-methods study. Emergency physicians interpreted 1,835 pediatric MSK extremity radiographs using an on-line platform. This generated 195,321 data points, which were used to determine case difficulty terciles (easy, intermediate, hard). Cases were also ranked by clinical significance (low, medium, high) and each case was

plotted in a three-by-three matrix of difficulty and significance. A multidisciplinary panel of physician and parent stakeholders then determined acceptable accuracy for each of the nine cells. An overall competency standard was derived from the weighted sum.

Results: The median difficulty rating was -1.8 logits (IQR -4.1, 3.2), with significant differences between body regions ($p < 0.0001$). There were 1,055 (57.8%) low, 424 (23.1%) medium, and 356 (19.1%) high risk cases. The panel's acceptable scores across the nine cells ranged from 76% to 95% and the sum of equal weighted scores yielded an overall performance-based competency score of 85.5% accuracy.

Conclusions: Using a purposeful sample of radiographs and the Ebel method of standard setting, we derived a performance-based competency standard for the skill of radiograph interpretation. This method could be generalized to drive evidence-based competency standard-setting for other image sets and can be tailored to specific levels of professional accountability.

OH1 – 3 Curriculum

OH1-3-1, 60891

Knowledge and Attitudes on Artificial Intelligence in Healthcare: A Provincial Survey of Medical Students

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Background/Purpose: There is growing acknowledgement that undergraduate medical education (UGME) must play a formal role in instructing future physicians on the promises and limitations of artificial intelligence (AI), particularly as these tools are integrated into medical practice. Despite calls to integrate AI education into UGME, there remains a paucity of tangible learning objectives and frameworks to guide curricular development. Gauging learner sentiment and opinion on topics in AI is integral to identifying priority areas for curricular development.

Methods: We conducted an exploratory survey of medical students' knowledge of AI, perceptions on the role of AI in medicine, and preferences surrounding the integration of AI competencies into medical education. The survey was completed by 321 medical students (13.4% response rate) at four medical schools in Ontario.

Results: Medical students are generally optimistic about the future capability of AI to carry out many clinical and administrative healthcare functions, with reservations about specific tasks such as personal counselling and empathetic care. Students believe AI will raise novel ethical and social challenges relevant to health equity. Students are concerned about how AI will affect the medical job market, with 25% responding that it is actively impacting their choice of specialty. Students agree that medical education must do more to prepare them for the impact of AI in medicine (79%), with the majority (68%) believing this training should begin in UGME.

Conclusions: Medical students expect AI will be widely integrated into healthcare and are enthusiastic about obtaining AI competencies in UGME.

OH1-3-2, 60600

Spiralling pre-clerkship concepts into the clinical phase: Augmenting knowledge transfer using innovative technology-enhanced curriculum activities.

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Background/Purpose: We sought to enhance knowledge transfer in the Family Medicine clerkship by developing a series of theory-driven online activities that integrate pre-clerkship problem-based learning (PBL) cases into more complex clinical scenarios. We hypothesized the new curriculum would increase students' ability to apply foundational knowledge, result in improved exit examination scores and be favourably received by students and faculty.

Methods: A series of asynchronous modules were developed, building on pre-clerkship problems and incorporating evidence-based instructional design. These were sequenced alongside synchronous PBL-style webinar-delivered tutorials. Students entering their core Family Medicine clerkship from May 2019 participated in the curriculum. A three-armed parallel, convergent mixed methods design was employed using both quantitative and qualitative methods that included review of student performance on knowledge tests and interviews with students and faculty to ascertain their perceptions.

Results: The curriculum was well-received by students. Knowledge test scores increased from pre- to mid-rotation; the difference from mid- to end-rotation was not significant. Exit exam scores showed a trend upward

compared to previous cohorts, but the difference was not significant. Students and faculty perceived the curriculum as beneficial. Tutor training is critical to effective remote content delivery and student engagement.

Conclusions: The curriculum gave students more opportunities for knowledge translation and could be adapted for other clerkships. High quality online learning activities have become critical as medical schools have had to pivot away from direct clinical experience. The investment in e-learning has had positive benefits, and will continue to anchor the clerkship learning experience. The curriculum gave students more opportunities for knowledge translation and could be adapted for other clerkships. High quality online learning activities have become critical as medical schools have had to pivot away from direct clinical experience. The investment in e-learning has had positive benefits, and will continue to anchor the clerkship learning experience.

OH1-3-3, 60552

The Companion Curriculum: An evaluation of arts and humanities in medical education.

Charlotte Axelrod University of Toronto, **Connor Brenna** University of Toronto, **Ariel Gershon** University of Toronto, **Joyce Nyhof-Young** University of Toronto, **Allan Peterkin** University of Toronto

Background/Purpose: The key contributions of arts and humanities to medical education are known, but Canadian medical schools vary widely in their offerings. The Companion Curriculum (CC) is a student-curated set of humanities content, available optionally for medical students at the University of Toronto. This study is the first to evaluate the CC teaching model and to identify key challenges and motivators for its use.

Methods: A mixed-methods evaluation gauged uptake, perceived effectiveness, and student experiences with the CC across 4 years, using an online survey and focus groups. Narrative data were analyzed thematically and supported by descriptive statistical analysis of numeric data.

Results: Our survey response rate was 12% (128/1036 students). Roughly half of respondents were aware of the CC (n=67, 51.54%), and half had engaged with it at least once (n=69, 53.49%). Among students who did engage, 80% (n=55) reported learning something new and most relevant to the CanMEDS roles of Communicator, Health Advocate, Collaborator and Professional. Student perspectives were captured in two 3-4 person focus groups. Emergent themes were: The Value of Medical Humanities, Student Attitudes, Institutional Neglect,

Integration Challenges, and Recommendations. The CC was valued, but an educational culture prioritizing objectivity seemed a fundamental barrier to its uptake. Students likewise felt there was insufficient time for what is perceived as "additional work".

Conclusions: Despite demonstrated student interest in medical humanities, engagement with the CC is poor. Encouraging meaningful student engagement with arts and humanities requires institutional buy-in and promotion, with a focus on early and sustainable curricular integration.

OH1-3-4, 60919

Teaching medical students a new way of seeing: a curricular innovation for virtual care delivery

Shazeen Suleman University of Toronto, **Clare Hutchinson** University of Toronto, **Nirit Bernhard** University of Toronto, **Azadeh Moaveni** University of Toronto, **Angela Punnett** University of Toronto

Background: The COVID-19 pandemic has necessitated an abrupt shift in education and clinical delivery. To comply with necessary public health measures, many clinical programs have shifted to virtual patient care. Although both virtual and in-person consultations are forms of clinical assessment, there are important differences that require specific skills and preparation. Purpose: To teach medical students about virtual care models and develop an approach to clinical assessments virtually using a webinar and standardized patient (SP) encounter.

Summary of Innovation: A multi-disciplinary team with clinical experience in virtual care created a 1-hour webinar for clinical clerks. The webinar reviewed types of virtual care, barriers to and facilitators of the different modalities in addition to challenges regarding confidentiality, equity, professionalism and technical troubleshooting. Students participated in a 30-minute small group case discussion with a preceptor and SP, designed to test commonly encountered difficulties. Results: 258 students participated in the webinar and small-group discussions, with 15 SPs and 37 small-group preceptors. Students appreciated the practical nature of the tips provided in the lecture. The virtual encounter with an SP was described as engaging and allowed students to feel more comfortable with this care delivery model. The webinar received an overall score of 3.69/5 (n=56) and the small group discussions 4.07/5 (n=60).

Conclusions: We successfully developed a curricular intervention to teach clinical skills in virtual care, successfully utilising SP encounters. Future directions

include long-term follow-up of the impact on actual virtual care delivery.

April 20th, 2021 - 16:30 EST
OH2 – 2 Works in Progress

OH2-2-1, 60720

A Joint Approach to Cannabis CPD: Integrated, Multimodal, and Living Education

Sarah Tajani University of British Columbia, **Vivian Lam** University of British Columbia, **Jennie Barrows** University of British Columbia, **Simon Moore** University of British Columbia

Background/Purpose: With its recent legalization, health providers are increasingly approached by patients for information on recreational and medicinal cannabis. Public awareness of benefits and harms varies widely, and providers must be confident engaging in conversations about cannabis consumption. To meet this need, the UBC Division of Continuing Professional Development partnered with the Ministry of Mental Health and Addictions to provide multimodal accredited cannabis resources and education on topics with the greatest impact on care.

Summary of innovation: Cannabis Education for Health Care Providers adopts a tiered approach to equip providers with the knowledge, resources, and tools to make informed and shared decisions with patients. This educational strategy is longitudinal, modular and iterative, releasing content in various yet integrated modalities to enable and incentivize learner participation. Modalities include an introductory webinar, self-directed online course, small-group case-based workshops employing a flipped classroom model, and interactive, continually updated 'living' point-of-care resources. Being sensitive to time constraints providers face, educational design allows learners to build their own pathways (i.e. engage in one or multiple activities).

Conclusions: The iterative approach applied to Cannabis Education for Health Care Providers facilitates the gathering of specific learner needs post-delivery. Needs identified are used to inform subsequently produced education. Further, as evidence supporting use of medical cannabis is continually changing, providers require up-to-date education as evidence emerges. 'Living' POC resources are continuously updated to address needs, ensuring new evidence is appropriately integrated. The approach adopts best practices in adult learning to offer practical, relevant options learners may select in accordance with their goals.

OH2-2-2, 60734

What's the Problem? Collaborating Across Specialties to Develop a Novel PGY-1 Medical Psychiatry Case-Based Curriculum

Natasha Snelgrove McMaster University, **Michael Brown** McMaster University, **Sandra Westcott** McMaster University, **Sheila Harms** McMaster University, **Alim Pardhan** McMaster University, **Kaif Pardhan** McMaster University

Background/Purpose: Until 2019, PGY-1 psychiatry residents at McMaster University participated in academic learning sessions that were held with numerous other specialties, leaving psychiatry residents feeling that these sessions lacked applicability to their own learning. Due to changes at the postgraduate level, our program developed an independent PGY-1 medical psychiatry curriculum to address resident needs and improve the learning gap between psychiatry and medicine.

Summary of innovation: A scoping assessment was completed by collating focus group feedback and rotation assessments from the previous curriculum. This data grounded the planning and development of a case-based PGY-1 psychiatry curriculum with a medical focus. This innovation relies on a group of interdisciplinary educators from Psychiatry, Emergency Medicine, Neurology and Internal Medicine who actively participated in curriculum development. 15 case-based sessions, including simulation sessions, were created focusing on core topics including cardiac emergencies, seizures, neurological issues, and chronic health issues, situated within psychiatric settings. Significant depth of medical information is provided including labs and images, enhancing learning across both medical and psychiatric objectives. Triple-jump style cases allow for learning and application of knowledge within sessions and aim to improve knowledge retention and application. Each session concludes with formal learning reflections, designed to consolidate knowledge and promote lifelong learning.

Conclusions: This session will discuss the cross-disciplinary collaborative process involved in curriculum development, provide examples of cases developed, and discuss how attendees can use this method to develop robust, cross-disciplinary curricula relevant to learners within their own settings.

OH2-2-4, 59662

Development and Evaluation of a Multisource Feedback (MSF) Form for Residency Program Director Competencies

Armand Aalamian McGill, **Theresa Beesley** McGill, **Evelyn Constantin** McGill, **Mara Kontopoulos** McGill, **Patricia Wade** McGill

Background/Purpose: Program directors (PDs) have complex roles in residency education and are expected to demonstrate competence in multiple areas specifically, leadership. However, PDs can receive minimal to no feedback on their leadership performance. McGill University's Postgraduate Education team aimed to develop a program evaluation process using a multisource feedback (MSF) form to provide feedback from multiple perspectives within the residency program to PDs.

Summary of innovation: The MSF form was developed using an iterative and scholarly approach, including a literature review to identify PD competencies, identification of PD roles from the PGME job description and mapping to the CanRAC Standards. Prior to implementation, the form was pilot tested with 5 residency programs ensuring applicability, relevance, and value of the MSF form items. Feedback was incorporated into the final version of the form. The MSF form was distributed to the Department Chair, PD, Program Administrator, Faculty Member, and Chief/Senior Resident(s) to gather standardized performance data of a residency program PD who completed 12-24 months of service. Data were analyzed to provide an aggregate score for the PD's performance. Scores were matched to an analytical rubric allowing the PGME Office to provide a one-page report with formative feedback and strategies to enhance PD performance.

Conclusions: The MSF form establishes a formal and standardized QI process to provide PDs with formative feedback on their competencies that can potentially enhance performance. The form will undergo a meta-evaluation at year 1, 3 and 5. Additionally, the form provides an opportunity to highlight the performance of PDs with effective leadership and informs the PGME Leadership and Department Chairs of competencies that result in effective leadership of residency programs.

OH2–3 Teaching & Learning- Undergraduate

OH2-3-1, 60772

Interpretation Training for Multilingual Medical and Dental Students: A Pilot Study of a Virtual Interactive Workshop

Darya Naumova McGill, **Kenzy Abdelhamid** McGill, **Xinyu Ji** McGill, **Kedar Mate** McGill, **Bertrand Lebouché** McGill

Background/Purpose: Language barriers pose a serious obstacle to the delivery of healthcare services. Evidence for language barriers is accumulating, especially in multicultural countries such as Canada. Professional interpretation services are not widely implemented in Canadian hospitals. Training multilingual medical students in the basics of interpretation is a potential strategy for addressing language barriers.

Summary of innovation: This is a pilot study examining the impact of a single 2-hour virtual, interactive workshop on the knowledge and comfort of multilingual medical and dental students with the role of an interpreter. Through ZOOM, each workshop consisted of a theoretical, practical and feedback session, engaging >12 students with 2 moderators. Anonymously and voluntarily participants completed online pre- and post-questionnaires to evaluate knowledge of the basics of interpretation, and the change in self-perceived comfort and qualification with taking this role. Secondary outcomes included workshop feasibility and satisfaction.

Conclusions: 72 multilingual students, including 49 study participants, were trained over 10 workshops. Participants varied in gender, age, ethnicity, immigration status and year of study; together they declared fluency in 23 non-official Canadian languages. None had received previous training, but over half have interpreted in the past. The workshop resulted in a significant increase in knowledge, self-perceived comfort and qualification in performing medical interpretation. The participants were satisfied with the virtual training, found it necessary and judged the online platform, duration, and training group arrangements to be appropriate. Thus, a short, virtual, interactive, peer-led medical interpretation workshop for multilingual trainees is feasible, effective and well-received.

OH2-3-2, 60027

Introduction of the National Electives Diversification Policy: A McGill University Case Study

Alexandra Cohen McGill, **Sonia Macfarlane** McGill

Background/Purpose: At CCME 2018, the 16 Canadian Faculties of Medicine endorsed the creation of a national electives policy. This policy would enforce a maximum of eight weeks in any entry-level discipline, with the goal of diversifying clerkship training and promoting parallel career-planning. Medical students are facing significant concern over the increasing number of unmatched Canadian Medical Graduates. When the national electives policy was first introduced at McGill, student response was subjectively negative. We thus sought to elicit both quantitative and qualitative feedback, with the goal of advocating for the student perspective prior to and throughout policy implementation.

Methods: Two anonymous online surveys were sent to all McGill medical students in September and December of 2018. Narrative feedback was collected in four town hall meetings.

Results: Seventy percent (First survey, N=165) and 66% (Second survey, N=179) of survey respondents voted in favor of the national electives policy. Students expressed support for the following reasons: 1) Uniformity across Canada; 2) The opportunity to pursue multiple career paths; 3) Predicted financial benefits due to perceived decreased travel needs. Students reported concerns regarding the following issues: 1) Potential decreased exposure to clinical supervisors; 2) Uncertainty about residency selection criteria; 3) Concern for country-wide policy enforcement. Students were tentative with regards to implementation of the policy.

Conclusions: Despite the initial negative response, McGill students were predominantly in favor of the national electives policy. Given the shifting Canadian landscape of residency positions, students expressed interest in maintaining collaboration with policy-makers throughout the implementation and review process.

OH2-3-3, 60617

Internal Medicine Resident Observership Program: Near-Peer Learning on the CTU for Pre-Clerkship Medical Students

Shaima Kaka University of Ottawa, **Marie-Eve Mathieu** University of Ottawa, **Deeksha Kundapur** University of Ottawa, **Alexandre Pratt** University of Ottawa, **Hamza Mahmood** University of Ottawa, **Kevin Hill** University of Ottawa, **Aimee Li** University of Ottawa,

Background/Purpose: Pre-clerkship clinical observerships at Canadian medical schools are typically limited to certain clinical environments. The internal medicine (IM) clinical teaching unit (CTU) is not currently one of these settings due to high pre-existing teaching expectations placed on staff physicians. The CTU is a mandatory component of clerkship and is a common source of anxiety for students. Near-peer (medical student-resident) shadowing has demonstrated numerous benefits including facilitating learning and lowering learner apprehension. At uOttawa there was IM resident interest in mentoring students.

Summary of innovation: We developed a no-cost "Internal Medicine Resident Observership Program" where second year medical students at uOttawa completed 5 hours of resident shadowing on the CTU or IM consult service. We assessed students' perceptions of resident shadowing, IM residency, and knowledge and anxiety towards CTU.

Conclusions: We compared pre- and post-program survey responses from 26 participants using one-tailed Wilcoxon signed-rank testing of deidentified Likert scale data. Benefits of near-peer learning were demonstrated by significant improvements in students' impression of resident teaching and improved perceptions of their understanding of IM residency and the role of a resident in patient care (p<0.05). Lastly, exposure to CTU significantly improved students' self-rated understanding of CTU and decreased anxiety towards CTU as an intimidating learning environment (p<0.001). This program highlights the value of near-peer resident shadowing in fostering comfortable learning opportunities for pre-clerkship medical students. Implementing similar programs across Canadian medical schools may address similar gaps in pre-clerkship clinical exposure.

OH2-3-4, 60064

Discovery Healthcare: Encouraging Highschool Students in South-Western Ontario to Pursue Careers in Healthcare

Julia Petta Western University, **Arita Alija** Western University, **Vivian Tia** Western University, **Richard Yu** Western University

Background/Purpose: South-Western Ontario (SWO) continues to face challenges recruiting healthcare professionals, particularly to rural sites. In order to combat this, healthcare careers can be promoted among highschool students in SWO, as they are still in the midst of deciding on their future career, with the intention of them returning to their community. These objectives were executed through Discovery Healthcare (DHC); a summer camp aimed to expose highschool students in SWO to a broad spectrum of healthcare careers to promote interest in these fields and retention in their communities.

Summary of innovation: Five-day long camps were held in Leamington, Sarnia, Chatham-Kent and Wingham throughout July 2019 facilitated by four medical students. There was a total of 77 students with the majority going into grades 9 and 10. Students heard from local guest speakers in fields such as medicine, nursing, and allied health. Some spent an afternoon shadowing healthcare professionals in community hospitals, and did an ambulance tour with a paramedic. They had the chance to learn clinical skills such as vitals, casting, and suturing. Students also worked through case diagnoses and learned about social determinants of health.

Conclusions: Surveys were distributed to students at the beginning and end of each camp in order to gauge their understanding of pathways to different healthcare careers, and their interest in pursuing them. After the camp, they had a greater understanding, but an increase in interest depended on local availability of speakers. They were also interested in additional careers that they had not previously considered. DHC aspires to further its impact by inspiring more highschool students in SWO to pursue healthcare careers. We hope that this initiative will launch similar programs in other underserved areas.

OH2-3-5, 60305

Cultivating Connection: Medical Mandarin for and by Pre-clerkship Medical Students

Jin Sheng Zhou University of Toronto, **RuiQi Chen** University of Toronto, **Yu Yang Feng** University of Toronto, **Yao Lu** University of Toronto, **Joyce Nyhof-Young** University of Toronto

Background: Language discordance between patients and healthcare providers adversely affects health outcomes. Medical students at the University of Toronto (UofT) created a peer-led program for classmates with basic Mandarin skills to learn and practice medical Mandarin. The Medical Mandarin Education Program (MMEP) helps students prepare for delivering culturally competent and linguistically concordant care to future patients.

Summary of innovation: Ten sessions with 25 unique participants - 1st and 2nd year MD students - were held over an academic year. Eight student-led sessions taught content paralleling the pre-clerkship curriculum; two physician-led sessions promoted cultural understanding and practice tips. Focus groups and a post-program survey explored participants' perceptions of program delivery, motivations to participate, and resulting personal and professional development.

Conclusions: Two focus groups (n=12 participants) and 19 surveys (response rate=76%) were included. Students' motivations to participate in MMEP included witnessing language discordance, recognizing medical Mandarin as an asset, and community expectations. Students reported high program satisfaction and improved comfort speaking Mandarin in both casual and professional settings. Other outcomes included increased comfort with and likelihood of using clinical Mandarin in future patient care, a developing sense of peer linguistic and cultural community, and increased understanding of cultural diversity. This novel collaboration between students and physicians appears to help bridge linguistic gaps in our medical education. These results provide a curriculum framework and lessons learned for health professions students and faculty interested in developing similar language programs.

Workshops

April 17th, 2021 - 10:00 EST

WA1-1-60616

Considerations for Online Synchronous Learning Environments (SOLE)

Heather MacNeill University of Toronto, **Susan Glover Takahashi** University of Toronto, **Suzan Schneeweiss** University of Toronto, **Latika Nirula** University of Toronto, **Jana Lazor** University of Toronto, **Heather MacNeill** University of Toronto, **Susanna Talarico** University of Toronto, **Lindsay Baker** University of Toronto

Rationale/Background: The COVID-19 pandemic has brought a rapid shift to online-teaching and learning, however many faculty have little to no experience in navigating these contexts1. There is a clear need to support and provide guidance to faculty, particularly in SOLE. In response, a group of education leaders from across the medical education continuum (undergraduate, post-graduate, continuing professional development) used a collaborative and iterative design process to create a faculty development (FD) resource. Drawing from evidence-informed pedagogical principles such as active learning and purposely attending to principles of equity and universal design for learning, the resource centres around six key considerations: • Accessibility • Equity & inclusivity, • Collaboration • Learner Engagement • Educational Context • Privacy, Security & Copyright Workshop participants will explore these considerations as they relate to their own virtual learning contexts and designs.

Methods: This workshop will introduce participants to Garrison's Community of Inquiry framework2 for online learning and the six considerations for SOLEs highlighted in the FD resource. Learners will work in small breakout groups organized by each consideration to create, explore, and solve case examples using the "build-a-case" method3, through collective personal experiences, curated resources, and facilitated discussion. Each group will then compare with the larger group on their questions and discoveries, generating further discussion.

Target audience: Healthcare educators and administrators, transitioning to SOLE

Learning objectives: 1. Describe key considerations when transitioning teaching to SOLE 2. Apply these key

considerations to build an educational case example, informed by best practices and practical solutions.

WA1-2-60482

Teaching Virtual Care in Canada

Kyle Carter Western University, **Reyhaneh Keshmiri** Western University, **Daniel Grushka** Western University, **Obaidullah Khan** Western University

Rationale/Background: Virtual care is defined as "any interaction between patients and /or member of their circle of care, occurring remotely, using any forms of communication or information technologies, with the aim of facilitating or maximizing the quality and effectiveness of patient care." (1) Prior to the COVID-19 pandemic, 4% of patient interactions across Canada were virtual. This scalable method of care delivery quickly shifted to 60%, thanks to infrastructures already in place. (2) However, educators and providers have limited training in both how to perform and teach virtual care.

Methods: This workshop aims to help bridge this gap by first conducting a needs assessment of participants through live polling, followed by discussion of the fundamentals of virtual care delivery, teaching, and evaluation using a combination of Socratic and didactic teaching methods based on learners' needs. Participants will then be separated into small breakout groups to engage in hand-on virtual care assessment and teaching methods. Clinical cases, role-play scenarios, and group discussions will be used and centred around the objectives of this workshop.

Target audience: Physicians, educators, and allied health professionals considering or currently engaging in the delivery of virtual care in Canada.

Learning objectives: 1. Understand the current state of virtual care delivery and use in Canada. 2. Gain confidence in the implementation of virtual care tools in medicine. 3. Acquire skills to teach and evaluate learners delivering virtual care to patients.

WA1-3-60908

Providing Care for LGBT2SQ+ Patients: Healthcare Provider Allyship Workshop

Michael Scott University of Toronto, **Tehmina Ahmad** University of Toronto, **Miranda Schreiber** University of Toronto, **Jeremy Cygler** University of Toronto, **Wilson Kwong** University of Toronto, **Jacqueline James** University of Toronto

Rationale/Background: Lesbian, gay, bisexual, transgender, two-spirit, and/or queer (LGBT2SQ+) people, especially those who are Black or Indigenous, experience disproportionately poorer health outcomes. Some disparities can be explained by negative encounters with healthcare providers, who may lack knowledge on queer and trans-specific health issues. Allyship refers to taking action on behalf of an underserved group one does not belong to. This workshop offers a solutions-focused framework for educators to provide LGBT2SQ+ patients compassionate, dignified care.

Methods: The workshop begins with an overview of the historical, philosophic context of LGBT2SQ+ health disparities, looking at how systemic racism and colonialism have harmed these communities. Clinical scenarios addressing practical aspects of LGBT2SQ+ care (using videos with standardized patient actors) are then discussed with facilitators, with scenarios designed to emphasize opportunities for allyship. Attendees will identify and address their own biases and assumptions, and learn about concrete actions in order to provide patient-centred, intersectional care for LGBT2SQ+ patients. Topics covered include a study of how to provide LGBT2SQ+ sexual healthcare and informed gender-affirming hormone therapy for trans patients.

Target audience: Medical educators who seek to incorporate LGBT2SQ+ health content into their educational programmes for healthcare professionals or trainees (at all levels).

Learning objectives: 1. Describe systemic health inequities faced by LGBT2SQ+ patients, especially those who are Black, Indigenous, and/or disabled 2. Know options for providing safe and dignified care to LGBT2SQ+ patients and how to teach about it 3. Construct an approach to content delivery of this curriculum using the toolkit provided

April 17th, 2021 - 11:30 EST

WA2-1-60214

Discovering Cultural Humility in Healthcare Education

Dalia Al Mouaswas The Michener Institute of Education at UHN, **Mohammad Salhia** Michener Institute of Education at UHN

Rationale/Background: Organizations have witnessed a vast increase in the number of diverse learners, patients and providers that bring different lived experiences and ideas of culture. Our organizations, by default, are shifting towards becoming increasingly diverse in their makeup. Arguably however, there seems to be a disconnect between the structures we work in and the populations they serve. The workshop explores the notions of cultural humility, implicit bias and belonging and how they can enhance our practices as clinicians, educators and learners. The workshop also focuses on the importance and power of language in the fostering a culture of humility and belonging. By looking at their personal experiences and the use of case studies and small group discussions, participants will be encouraged to challenge their personal lens as well as current systems and philosophies.

Methods: Workshop style with group discussions and case studies

Target audience: Healthcare providers, educators, administrators, leaders and learners

Learning objectives: Explore the concepts of cultural humility, implicit bias and belonging and how they can enhance our practices as providers, educators and learners - Explore the impact of culture and language on our lens as educators, providers and learners - Challenge current ways of thinking, systems and philosophies

WA2-2-60669

Capacity Building for Case-based Quality and Safety Education using QuaCC: the Quality Care Curriculum

Siobhán Neville University of Limerick, Ireland, **Julie Johnstone** University of Toronto, **Brie Yama** University of Toronto, **Zia Bismilla** University of Toronto

Rationale/Background: Quality Improvement and Patient Safety (QIPS) teaching is becoming widely accepted as a vital aspect of modern medical education1. Despite this, there exist several barriers to its effective implementation in the clinical context, including limited skills, resources, and opportunities for applied and interactive learning2. Many institutions rely on a combination of didactic lectures with mandatory QI projects for residents or medical students3. We have designed an innovative,

longitudinal, case-based QIPS curriculum, which addresses learning needs across undergraduate, post-graduate, and faculty development levels. Each session focuses on the application of a quality, safety or leadership concept to a real case, which is identified and presented by the learners, followed by a facilitated, clinically relevant discussion.

Methods: The workshop will build capacity to facilitate case-based QIPS education sessions through the use of small group activities. Groups will be provided with preparatory materials and be coached through delivering and participating in fun, interactive, and adaptable sample sessions. An approach to the implementation and evaluation of such a curriculum will be explored.

Target audience: Clinical educators (Faculty, Fellows, Senior Residents) with an interest in QIPS.

Learning objectives: By the end of this session, participants will be able to 1. Develop a curriculum for case-based learning of QIPS materials 2. Deliver QIPS rounds to engage learners at all levels 3. Evaluate the success of their case-based QIPS curriculum in a clinical context

WA2-3-60658

Improving Feedback Conversations: A Novel Professional Development Approach for Preceptors and Learners

James Goertzen Northern Ontario School of Medicine, **Erin Cameron** Northern Ontario School of Medicine, **Clare Cook** Northern Ontario School of Medicine

Rationale/Background: Although feedback improves clinical and educational performance, giving and receiving feedback can be challenging and evokes emotional responses for both preceptors and learners. While faculty development has previously focused on improving preceptor feedback skills, effective feedback is now being envisioned as a two way conversation. Approaches to professional development that engage both preceptors and learners in practicing feedback skills together is showing early signs of building educational alliances which are key for coaching bidirectional feedback conversations. Informed by education and business literature and patterned after NOSM preceptor/learner sessions, attendees will have a chance to: a) experience a new professional development approach to feedback; b) identify strategies to implement this approach in their educational context.

Methods: Through facilitated discussions, participants will share experiences giving and receiving feedback and

discuss the importance of creating safe, collaborative learning environments. A short video will illustrate the Ask-Tell-Ask framework which can be applied to undergraduate, postgraduate and faculty development settings for generalist, family medicine and specialist preceptors and learners. Participants will practice feedback scenarios applying the Ask-Tell-Ask framework, assuming preceptor, learner or observer roles. Learnings will be debriefed. Strategies for implementing feedback professional development in attendee educational contexts will be explored.

Target audience: Students, residents, preceptors, educational leaders

Learning objectives: 1. Apply strategies to build preceptor-learner trust and rapport during feedback conversations. 2. Identify strategies to support further development of learner and preceptor feedback giving and receiving competencies.

April 17th, 2021 - 15:30 EST

WB1-1-60554

Responding to the Opioid Crisis by Designing and Developing a National UGME Competency-Based Curriculum on Pain Medicine, Addictions and Substance Use Disorder in Canada

Lisa Graves Western Michigan University Homer Stryker M.D. School of Medicine, **Fran Kirby** The Association of Faculties of Medicine of Canada, **Richard van Wylick** Queen's University, **Jeanne Mulder** Queen's University, **Klodiana Kolomitro** Queen's University

Rationale/Background: In 2018, the Association of Faculties of Medicine of Canada undertook a substantive initiative, supported by Health Canada, originally titled "Academic Medicine Responds to the Opioid Crisis: Developing a Canada wide, competency-based online curriculum for future physicians in pain management, substance abuse and addictions". This workshop provides participants with an approach for addressing the largest current public health crisis in Canada by creating an educational opportunity targeting undergraduate medical students to gain knowledge, confidence, competence and motivation to diagnose, treat and manage pain with an understanding of addictions, substance use disorder and harm reduction, while supporting the social accountability mandates of medical schools. Details of the pilot launch and expansion into phase 2 including postgraduate and continuing professional development will be included.

Methods: This workshop will begin with an introduction to the development of the curriculum, then a

demonstration of the design elements used such as the spiral curriculum and adoption of formative and synoptic assessments. Participants will engage in an interactive large group discussion on the strengths and challenges of instructional design that promotes national collaboration and a standardized educational program. Small group discussion will focus on strategies for curriculum implementation with various models of medical education. An important focus will be on lessons learned throughout the project.

Target audience: This session is best suited for medical educators and students who have an interest in teaching methods related to pain management, substance use, harm reduction, and/or curriculum development with a focus at the undergraduate medical level.

Learning objectives: At the end of this workshop, you will be able to: 1. Describe how AFMC's Response to Opioids Project can impact the largest public health crisis in Canada. 2. Identify the challenges and opportunities in building a national competency-based online bilingual curriculum for undergraduate medical learners with an emphasis on lessons learned. 3. Explore high-impact practices for engaging health and education stakeholders to support consensus building.

WB1-2-60542

Successful "in-the-moment" feedback and coaching conversations in the era of CBME and workplace-based assessment

Jocelyn Lockyer University of Calgary, Joan Sargeant Dalhousie University Heather Armson University of Calgary, Jessica Trier Queen's University Subha Ramani Harvard Medical School, Mary Grace Zetkulic Hackensack Meridian School of Medicine at Seton Hall, Karen Könings Maastricht Univesity, Amanda Roze des Ordons University of Calgary

Rationale/Background: Feedback is a dynamic and co-constructive interaction in the context of a safe and mutually respectful relationship for the purpose of challenging a learner's (and educator's) ways of thinking, acting or being to support growth (Ajjawi & Regehr, 2019). The R2C2 model for feedback and coaching, with four phases in which supervisors and learners build relationship, explore reactions and reflections, determine content, and coach for change to co-create an action plan, was developed as a model to facilitate such conversations. It was based on theory and research related to self-assessment, cognitive domains, humanism, commitment to change and implementation science. It has been tested and found effective for work with physicians in practice, nurse practitioners, and residents across several countries

and disciplines. Recently, the researchers have modified the R2C2 model for use with in-the-moment feedback and coaching that occur in the clinical environment. This workshop will provide participants with an opportunity to explore and practice the R2C2 in-the-moment model (https://medicine.dal.ca/departments/core-units/cpd/faculty-development/R2C2.html) and discuss its applicability within their own context.

Methods: This interactive workshop will draw upon participants' experiences through: 1. Introductions and large group discussion of participant experiences (10 minutes) 2. Presentation and demonstration of the model (15 mins) 3. Small group discussion of the model (10 mins) 4. Coaching practice with case scenarios and debriefing (40 mins) 5. Large group discussion of R2C2 in-the moment coaching and feedback and take-home messages (15 mins)

Target audience: Faculty members and those involved in providing feedback at point of care

Learning objectives: Participants will: 1. Share experiences providing "in-the-moment" feedback within clinical settings. 2. Practice applying the R2C2 ITM model to case scenarios. 3. Identify the utility of and barriers to integration of the R2C2 in-the moment (ITM) feedback and coaching model and its application within their work.

WB1-3-60742

Work-Life Harmony: Utilizing practical tools to harmonise time, emotions, energy, and purpose while practicing medicine

Seyara Shwetz University of Saskatchewan, Anurag Saxena University of Saskatchewan

Rationale/Background: In a profession that is dedicated to healing others, many health care professionals feel torn as they attempt to balance work demands with their personal lives. The internal struggles between work, life, and self is a significant driver of burnout. While other Wellness Champions focus on moral injury and workload as drivers of burnout, this workshop will explore how a focus on individual core values can shape the management of time and energy, simultaneously empowering the physician to juggle the demands of work, life, and self in a harmonious way. We will offer ideas to consider for transformation of time management that simultaneously encourage personal fulfillment and social responsiveness.

Methods: This interactive workshop will alternate between brief didactic sessions and active, interactive, experiential learning. Participants will build tools that enhance management of their most important, but severely limited resources: time and energy. With a deliberate exploration into specific domains of wellness, including physical, mental, emotional, and spiritual, the participant will feel empowered to prioritize competing obligations in a way that constructively utilizes time and energy. Following a brief overview of key concepts, the participants will engage in paired, small group, and large group exercises to explore personal application of the principles and behaviours to their own lives. Employing gratitude, meditation, and joy as additional tools to further fortify emotional strength, the session will encourage the participant to reflect positively on how they dedicate their time and energy. Finally, the session will end with a personal reflection and continuing goal to strive for harmony in juggling the demands of work, life, and self.

Target audience: Postgraduate Residents; content is applicable to all levels of training and practice.

Learning objectives: After this session, participants will feel empowered to: 1. Apply practical strategies to harmonizing time, emotions, and energy while juggling demands from both external sources and self. 2. Further develop and utilize methods for consciously preserving and lifting energy. 3. Describe and apply adaptive self-reflection to ensure a consciously orchestrated, purposefully driven life. 4. Restore focus on the self-identified tenants that provide meaning and purpose to practicing medicine.

April 18th, 2021 - 11:00 EST

WC1-1-60539

Creating a Community of Care: Supporting Racialized Medical Students Through Equity-Based Mentorship

Umberin Najeeb University of Toronto, **Chantal Phillips** University of Toronto, **Shannon Giannitsopoulou** University of Toronto

Rationale/Background: Mentorship is a critical component of medical education. However, literature identifies a relative lack of formal mentorship opportunities for racialized and other minoritized medical learners. In response, the Faculty of Medicine's Office of Inclusion and Diversity created a formalized equity-based mentorship program called the Diversity Mentorship Program (DMP), which connects medical students from racialized and other marginalized groups with Faculty mentors of similar backgrounds or faculty members who self-identify as practicing allies. The DMP employs anti-oppression principles and a decolonial lens. Equity-based mentorship supports racialized medical students in overcoming systemic barriers in education, and provides bidirectional learning for mentees and mentors.

Methods: The workshop will include a didactic presentation interspersed with facilitated interactive small group discussions. The workshop will be spearheaded by a land acknowledgement and an introduction to anti-oppression principles. Then, a mentee and mentor from the DMP will share their mentorship experiences along with the challenges and opportunities identified in their mentorship relationships. Experiential exercises and methodological approaches will also be offered. Participants will have the opportunity to brainstorm how they might use the equitable approaches being presented in ways relevant to their own workplace or educational setting.

Target audience: Beginner to intermediate level workshop intended for teachers/educators who are involved in education and training of racialized and marginalized medical learners at undergraduate and postgraduate level.

Learning objectives: 1. Recognize equity-based mentorship as an effective strategy to support minoritized learners in our education spaces. 2. Gain insights on how to develop, implement and evaluate an equity-based mentorship program.

WC1-2-60810

Practical Strategies for Meaningful Allyship in Indigenous Health and Beyond

Ming-Ka Chan University of Manitoba, **Lisa Richardson** University of Toronto, **Marcia Anderson** University of Manitoba, **Javeed Sukera** Western University, **Jerry Maniate** University of Ottawa

Rationale/Background: Well intentioned efforts towards healthcare equity and diversity may backfire and erode trust and allyship. Existing frameworks and instructional strategies have shortcomings or limitations. Allyship is a concept that may have relevance to advance efforts for healthcare equity into the future yet is under-explored in healthcare and health professions education. This session will introduce the concept of allyship, how it is distinct and/or complementary to other concepts (e.g. cultural humility, anti-oppressive practice, etc.), while co-creating practical strategies for participants to build and practice allyship within their own contexts.

Methods • Icebreaker/reflection exercise through think-pair-share activities • Brief didactic with handout for introduction to terms and concepts • Storytelling and co-creation • Small group case discussion with large group debrief NB: if virtual, these strategies will be integrated & augmented through breakout rooms, polls, chats & whiteboard use.

Target audience: Anyone interested in developing as allies including learners, faculty, administrative staff or leaders

Learning objectives: Upon completion of this session, participants will be able to: 1) Define the concept of allyship and how it is distinct or complementary to other related concepts in medical education 2) Provide examples of how to enact allyship as it relates to indigenous health 3) Describe and practice strategies to build and enact allyship within own organizations

WC1-3-60633

Simulation to assess for collective competence

Anne Kawamura University of Toronto, **Briseida Mema** University of Toronto, **Dominique Piquette** University of Toronto

Rationale/Background: Physicians routinely work as part of large teams and as a result, patient outcomes are rarely related to the competence of an individual physician, but rather are related to the competence of the team. Despite this, assessments within CBME frameworks are focused on the competence of the individual trainee. In this workshop, presenters will discuss circumstances in which trainee's actions, decisions, and performance are mainly independent (individual) of team functioning and compare this to circumstances where intra-dependent (team) functioning dominates. This then sets the stage for the need for innovative assessment strategies that examines individual competence within a team context. Presenters will discuss the challenges of assessing for collective, team performance in the complex clinical environment. They will share their experience with using simulation scenarios that assess along the spectrum of individual to collective performance and two strategies for assessing individuals whose performance is dependent on other team members. One of these assessment strategies is based on studies in educational measurement and provides an approach for assessing collaboration and interactions amongst different team members and their contributions to outcomes. The second strategy is based on Multi Source Feedback (MSF) and uses team members' assessment of the individual trainee on a particular case to capture trainee's and team members' contributions. These assessment strategies attempt to determine the

contribution of the trainee to the final clinical outcome rather than attributing the clinical outcome to the individual trainee. Using simulation scenarios we present two assessment strategies that might be better suited to capture the "Collective Competence"

Methods: Large group discussion to review examples of Independent (individual) vs. intra dependent (team) • Mini lecture and small group work to design simulation scenarios that assess along the spectrum of independent vs. intra dependent • Case study in small groups to review current assessment tools for individuals and teams in simulation • Mini lecture and large group discussion on collective competence

Target audience: Health professions teachers and educators who are responsible for assessing trainees' within the context of a team

Learning objectives: 1. Discuss clinical situations where the clinical outcome is as a result of individual performance or a team performance 2. Describe strategies to assess individual and team contribution to the final performance and clinical outcome 3. Discuss the need for innovative assessments that look at the individual trainee within a team context

April 18th, 2021 - 11:30 EST

WC2-1-60835

Alone in the Ring: Research-based Theatre to promote equity and inclusion for people with disabilities in healthcare programs

Laura Yvonne Bulk

Rationale/Background: Healthcare has the lowest representation of workers with disabilities, suggesting that unaccommodating systems may be more prevalent in this sector than in others. The main barriers students with disabilities face are attitudes towards disability, stigma, lack of appropriate policies, and lack of knowledge of how to accommodate in the healthcare educational programs.

Methods: In our recent work, we used the innovative method of Research-Based Theatre to facilitate attitudinal change. A theatrical production is an accessible and experiential form of art-based knowledge translation. We have created a 40-minute play called Alone in the Ring, displaying students' and clinicians' lived experiences with disabilities in healthcare professions. The play was already shared with 1,000 students, faculty, and staff in healthcare programs and received outstanding feedback as engaging and thought-provoking. We will share the full

play, which was adapted into an online version presented by four actors. Following the play, and based on the stories presented, the actors who are also healthcare students and faculty with and without disabilities will facilitate an interactive workshop to explore ways to remove barriers and increase the participation of people with disabilities in healthcare programs.

Target audience: Healthcare students, staff, faculty, and other stakeholders with and without disabilities.

Learning objectives: (A) Participants will gain awareness of the barriers for inclusion and equity for people with disabilities in healthcare professions (B) Participants will reflect and identify their attitudes and perspectives of people with disabilities in healthcare professions. (C) Participants will learn about the actions they can take to increase the inclusion of people with disabilities in their own environments.

WC2-2-60606

A moment of fame for a lifetime of pain? Successfully navigating social media and advocacy in healthcare

Lyn Sonnenberg University of Alberta, **Ming-Ka Chan** University of Manitoba, **Simon Fleming** British Orthopaedic Trainees Association (BOTA), **Jamiu Busari** Maastricht University | Dr. Horácio E. Oduber Hospital, **Lyn Sonnenberg** University of Alberta, **Jamiu Busari** Maastricht University | Dr. Horácio E. Oduber Hospital

Rationale/Background: Successfully navigating social media can be overwhelming for many, troublemaking for some, and provide a far-reaching platform of incredible advocacy for others. Social media discussions in medical education seem to focus on either its promise as a new and exciting learning tool or as an endless pit of potential professionalism lapses. As a self-regulating body, we must ensure that, while modelling and teaching professional behaviour, we hold each other accountable. But how do we go about doing just that?

Methods: We will actively engage participants throughout the four sections of our session: 1) benefits of engaging with social media; 2) navigating controversy; 3) guiding principles of practice, and 4) calls to action that will lead us toward social media advocacy success. Unlike the average workshop, this session will be riddled with provocative social media polls and our own crowdsourcing, such as the #medbikini challenge and consequences for propagating #fakenews. Anticipating that this session could be happening online, we are prepared to use breakout sessions, polling, and the chat feature to ensure a high level of engagement.

Target audience: All levels, as this workshop is designed for educators, learners, faculty, and others involved in influencing medical education culture, teaching, and curriculum development.

Learning objectives: 1. identify common professionalism concerns related to social media use 2. develop awareness of social media practices at an individual, team, program, and institutional level that influence professionalism 3. promote a positive culture of professionalism relating to social media use that can be modeled by everyone

WC2-3-60337

How to Lead a Simulation Session Online: Learning from the Virtual Resus Room

Sarah Foohey University of Toronto, **Teresa Chan** McMaster University, **Alim Nagji** McMaster University, **Yusuf Yilmaz** McMaster University, **Matthew Sibbald** McMaster University, **Sandra Monteiro** McMaster University

Rationale/Background: Replacing in-person simulation sessions with virtual equivalents, as has been required by many educators during the COVID-19 pandemic, has been challenging. The Virtual Resus Room (VRR), developed by the lead author, is an online solution that uses Google Slides and Zoom to create an interactive environment for simulation training. Learners complete tasks by making synchronous edits to their "room", a shared Google Slide document consisting of a patient silhouette surrounded by moveable images of resuscitation equipment. Learners communicate via Zoom and collaborate as a team to do these tasks, introducing the opportunity for the rehearsal of crisis resource management skills. Facilitators type in vitals and update the case progression in response to the learners' decisions, creating an adaptable learning experience. Using the VRR as an example, we hope to demonstrate how to run an effective online simulation with a free, simple solution.

Methods: The workshop will begin with a brief didactic component outlining various online simulation strategies and our rationale for the development of and experience using the VRR. Participants will be given a brief demonstration about how to use the interface. Next, participants will be divided into groups of 4-6 to run a VRR case. The workshop will end with a discussion of their experience using the VRR.

Target audience: Students or educators interested in online simulation education.

Learning objectives: 1) Discuss the options for delivering online simulation sessions. 2) Understand how to use the

VRR to run a collaborative online simulation. 3) Run a VRR case and debrief about this experience.

April 18th, 2021 - 15:30 EST

WD1-1-60937

Beyond Nice: using the science of happiness to improve medical education

Julie Johnstone University of Toronto, **Kevin Weingarten** University of Toronto

Rationale/Background: Medicine is struggling with a perceived lack of empathy among physicians and worries around wellness. While common techniques to tackle these challenges include wellness or resilience programs, there is more to be done regarding how we structure the everyday learning environment. As medical educators, there is an opportunity to examine how our field can champion changes that will lead to greater happiness among our trainees and ourselves. By using evidence-based techniques from positive psychology and neuroscience we can model a culture where not only are we producing intelligent and efficient physicians, we are also supporting the development of empathy, optimism, and gratitude in an effort to improve lifelong enjoyment of our careers in medicine.

Methods: This session will alternate between presentations of evidence and small groups activities to explore concepts as they relate to the learning environment. Illustrated examples and guided questions will help participants consider how to integrate techniques. Emphasis will be placed cognitive errors that impede positive learning environments. This session will provide opportunities for larger group discussions around challenges that exist in changing the current learning cultures in medicine.

Target audience: This session is designed for any conference participants. It will be designed at a beginner level.

Learning objectives: 1. outline the evidence for positive psychology as it relates to the learning environment 2. describe how perspectives of success, purpose, and productive struggle impact happiness 3. develop practical strategies to bring kindness, empathy, gratitude, and civility into medical culture

WD1-2-60739

Countdown: Empowering medical educators to promote and enact planetary health principles

Sonja Wicklum University of Calgary, **Martina Kelly** University of Calgary, **Clark Svrcek** University of Calgary, **Celina Dharamshi** University of Calgary

Rationale/Background: The concept of Planetary Health (PH) reflects understanding that human health and civilization depend on flourishing natural systems. Many influential health organizations-including our own students (CFMS)-have issued policy statements and calls to action for the healthcare sector and medical education. As educators we are obliged to listen, to make meaningful space in curriculum, and robustly and sincerely engage in this topic. Join us for a workshop designed to explore PH and experience a flipped-classroom teaching technique.

Methods: 1) Overview of PH concepts and a review of seminal articles (15 min). 2) Utilize a jigsaw method to collaboratively tackle key PH challenge topics. Working as a team, each group will learn (25 mins) and then teach (15 mins) about a topic in PH from their chosen physician role perspective, summarizing three educational and two actionable points for change. 3) New groups formed will then discuss their knowledge, knowledge sources, and perspectives on this topic (e.g. What are "co-benefits", eco-anxiety? Should PH be in the medical school curriculum?) (20 mins). 4) Wrap-up (15 mins). This workshop can be done in-person and virtually. Using Padlet ®, teams record responses on a virtual whiteboard allowing us to synthesize material quickly and group-think actionable/educational items. Educators may continue to post after the conference - creating a new PH community of practice.

Target audience: Students, physicians, and educators.

Learning objectives: 1) Explain the core concepts of PH. 2) Apply the evidence base available in the literature. 3) Identify ways to make changes to promote PH. 4) Gain experience with a jigsaw method of teaching a complex subject.

WD1-3-60766

Incorporating medical humanities curriculum in your program: art as a window to clinician' psyche

Briseida Mema University of Toronto, **Anne Kawamura** University of Toronto, **Dominique Piquette** University of Toronto, **Kay Min** Johns Hopkins University, **Andrew Helmers** University of Toronto

Rationale/Background: Medicine unites science and art; its mandate is to heal patients rather than to fix

disembodied problems with evidence-based precision. Such healing demands a scientific method that is coupled with the myriad elements that collectively form the living Art of medicine. There are many who practice medicine and - privately or publicly - strive to capture the images, the stories, the poetry, and even the music of those moments of joy, tragedy, loss, recovery, life, and death. This effort to reflect upon and articulate the universal human condition through the lens of health, of sickness, and of death, constitutes the medical humanities, and exemplifies the convergence of Science and Art intrinsic to every clinical encounter. Within the discipline of the medical humanities, narrative medicine and reflective writing in particular can deepen our understanding of our patients and our experiences caring for them [1]. And just as physiology is applied to understand and address a patient's blood pressure or head trauma, so too the medical humanities invite an applied humanism: a technology-as-tecno (from the ancient Greek: craft, art) that serves the whole person and their human values. This workshop describes incorporating a medical humanities curriculum in your program.

Methods: Large group discussion on importance of Humanities curricula to encourage applied humanism and resilience of healthcare providers Case study followed by small group discussion on building and incorporating curricula in training programs Mini lecture and large group discussion in ways to evaluate and maintain humanities curricula in the program

Target audience: Educators planning to incorporate Medical Humanities curricula in their program

Learning objectives: Describe the importance of incorporating Medical Humanities Curricula in the training program Demonstrate ways to build Humanities curricula Discuss methods to evaluate Humanities curricula

April 19th, 2021 - 10:00 EST

WE1-1-60749

Making waves in our teaching practices: Applying motivational theory to optimize learner engagement, success and wellbeing

Greg Malin University of Saskatchewan, **Adam Neufeld** University of Calgary

Rationale/Background: As teachers, we focus on cognitive strategies to support student learning (e.g., retrieval, dual coding). However, an ingredient we often overlook is motivation, which facilitates student engagement in learning. Self-determination theory (SDT),

a motivational theory, can be applied in tangible ways to support learners' basic psychological needs and support intrinsic motivation to learn - associated with better recall, deeper learning, desire for optimal challenge, and even improved well-being. The purpose of this workshop is to apply SDT principles to understand how teachers support or hinder learner motivation, to implement strategies to support greater learner motivation, and to avoid approaches that hinder it.

Methods: This workshop blends large group discussion and small group interactive components. Participants will be introduced (15 mins) to the basic tenets and three basic psychological needs of SDT. Participants will actively engage in 3 facilitated small group discussions (15 mins each) brainstorming teaching strategies that support each of the 3 basic needs and teaching strategies to avoid that hinder each need. We will have a large group discussion (30 mins) summarizing the rationale for why certain teaching approaches are more or less supportive of learner motivation based on SDT.

Target audience: Faculty Teachers, Education Leaders, Residents, Students

Learning objectives: -Describe the principles of SDT, including the three basic needs of autonomy, competence, and relatedness, and how they affect motivation. -Describe teaching practices that support or hinder learner motivation. -Implement strategies to intentionally support learner motivation.

WE1-2-60828

Responsive Action: The Process of Engaging Community Partners in Evaluating a Service Learning Program for Undergraduate Medical Students and Applying the Results

Ian Whetter University of Manitoba, **Karen Cook** University of Manitoba, **Nina Condo** Elmwood Community Resource Centre, **Felicien Rubayita** Welcome Place, **Roger Berrington** CanU, **Chelsea Jalloh** University of Manitoba

Rationale/Background: Student experiences of educational initiatives are important sources of information to evaluate and improve education programs. In regards to Service Learning, while student perspectives about the program provide valuable insights into quality improvement, community partners who work with students also have unique and highly valuable perspectives to share. However, formalized mechanisms to collect feedback about educational programs from community partners often are not in place. Receiving and

responding to community partner feedback is imperative to inform ongoing Service Learning program improvements, and to ensure collaborative educational initiatives are reciprocally beneficial for both community and university partners.

Methods: This workshop will be developed and delivered collaboratively between university and community partners involved with Service Learning experiences for undergraduate medical students. Following a brief presentation of results from a recent survey of 36 community partner organizations involved in Service Learning, whole group and break out discussions will be used to address workshop learning objectives. Small group discussion topics may include: * Why is seeking community partner feedback about educational initiatives, such as Service Learning, an important action for universities to undertake? How does this action connect with concepts such as social accountability, health equity, and community engagement? * What are considerations that could both facilitate and/or impede universities engaging community partners in evaluation of educational programs? How might potential challenges/impediments be mitigated? * What are factors that could facilitate and/or impede universities being able to act upon the recommendations and feedback from community partners? How might these challenges be mitigated? * What is the role of "power" in community-university collaborations such as Service Learning? * In addition to engaging community partners in program evaluations, what are other ways universities could engage community partners in medical education initiatives such as Service Learning? (e.g., collaborations to develop learning objectives, assessment methods, sharing expertise as guest speakers, etc.).

Target audience: Service Learning coordinators; faculty involved with Service Learning design, implementation and evaluation; community organizations involved in Service Learning.

Learning objectives: 1. Highlight and discuss the importance of seeking community partner feedback regarding Service Learning programs. 2. Identify important considerations when designing and implementing approaches to seek feedback about Service Learning from community partners. 3. Discuss how to apply and respond to feedback from community partners to improve Service Learning programs. 4. Explore and discuss how universities can build and strengthen reciprocal working relationships with community partners.

WE1-3-60898

The COVID-19 Pandemic Virtual Revolution in Medical Education: No Going Back?

Dominique Piquette University of Toronto, **Briseida Mema** University of Toronto, **Anne Kawamura** University of Toronto

Rationale/Background: The COVID-19 pandemic triggered a mini "virtual revolution" as educational programs had to rapidly adapt their formal curriculum to virtual modalities. Although many programs reported having successfully transitioned to virtual platforms, others struggled because of lack of resources. Additionally, educators and learners have raised concerns about the shortcomings of virtual learning in fostering a sense of community among learners and in substituting for real-life experiences. The virtual shift has however created new educational opportunities for synchronous and asynchronous learning, international and inter-institutional collaborations, active learning, and home-based simulation. Now is the time to pause and reflect on what was gained and what was lost with this virtual revolution, and on how virtual learning should be integrated with in-person learning in the post-COVID-19 pandemic educational world. This workshop will explore the use, opportunities, and limitations of virtual learning in three domains of competence: medical decision-making, procedural skills, and communication.

Methods: After a brief review of the literature on the virtual transition during the COVID-19 pandemic (10 min), participants will be divided in three groups. Each group will be presented with a case study of a program wanting to combine virtual and in-person learning into an integrated curriculum for one domain of competence. The groups will also be provided with publications of educational initiatives published during the COVID-19 pandemic to guide their discussion (30 min). A facilitated large-group discussion will allow participants to share their reflections and develop a consensus on important principles to respect for balancing virtual and in-person learning (40 min).

Target audience: Program directors, educators, and teachers interested in the integration of virtual learning into learning activities.

Learning objectives: By the end of this workshop, participants will be able: (1) To discuss how virtual learning can complement in-person learning; (2) To

compare the benefits and limitations of virtual learning for different domains of competence.

April 19th, 2021 - 11:30 EST

WE2-1, 60323

Best Practices in CPD - Creating Effective Scientific Planning Committees

Suzan Schneeweiss University of Toronto, **Valerie Schulz** Western University, **Janice Harvey** The College of Family Physicians of Canada

Rationale/Background: When planning continuing professional development (CPD) activities, the importance of having an effective Scientific Planning Committee (SPC) is paramount.[1,2] The need for planning committees with superb skills and knowledge capacities is essential to a highly functional CPD system. Guidelines about the roles and best practices of the SPC are rare in the Canadian context, but necessary in order to meet the needs of health professionals lifelong learning. The goal of this workshop is to discuss educational and ethical principles for SPCs to use as they develop relevant and effective CPD while meeting national accreditation standards.

Methods: Using a combination of brief presentations and interactive learning techniques, we will review the role of the SPC for both online and in-person learning environments. Active learning techniques will include web-enabled audience participation techniques and case-based facilitated discussions. Tools and resources for effective SPC practices will be shared. Participants are welcome to bring CPD program ideas for discussion.

Target audience: Health professionals interested in developing CPD educational opportunities would benefit from an organized approach for effective SPC practices.

Learning objectives: 1. Describe the essential roles of the SPC members in the planning, development, and delivery of CPD activities. 2. Discuss unique considerations for SPCs to use when developing virtual CPD activities. 3. Apply the ethical principles of the National Standard for Support of Accredited CPD activities (2018) as well as the Canadian Medical Association Guidelines for Physician Interaction with Industry (2007).

WE2-2, 60506

FACILITATE: Acting-Based Course to Improve the Communication & Interpersonal Skills of Healthcare Professionals

Alexis de Vecchio Mayo Clinic, **James Homme** Mayo Clinic, **Phillip Moschella** Prisma Health – Upstate

Rationale/Background: Communication underlies physicians' scope of practice. CanMeds lists communicator as a core competency for medical practice and education. Various models of communication training have been proposed in medical school and residency training. Acting provides a unique approach to developing such skills. Our acting-based communication skills course, taught by a Canadian-American professional actor and physician, has been taught to hundreds of medical students, nursing students, and medical residents at multiple institutions in the United States and internationally.

Methods: We will conduct eight acting exercises, targeted to the unique needs of healthcare professionals, especially physicians. This workshop is hands-on, participatory, interactive. We start with a brief introduction about educational theory and evidence underlying this initiative. Our hand-picked exercises develop skills such as nonverbal communication, active listening, presence in the moment, situational awareness, and self-awareness. Each exercise is followed by clinical correlates and debrief with participants. The workshop culminates in a standardized patient vignette in which participants play a patient and provider, and apply skills developed. We also provide a communication toolbox with tools they can implement on their next shift.

Target audience: Healthcare professionals at every level of training. This is an inter-professional initiative. We welcome a mixed audience of medical students, resident physicians, consultants/attendings, and allied members of the healthcare team.

Learning objectives: Upon completion, participants will be able to apply acting skills to facilitate patient-centered communication, utilize specific tools to improve their clinical practice, and practice skills of non-verbal communication, self-awareness, and active listening.

WE2-3, 60873

Teaching Rebooted: Strategies for Facilitating Virtual Learning through a Pandemic

Susanna Talarico University of Toronto, **Hosanna Au** University of Toronto, **Robert Goldberg** University of Toronto, **Jana Lazor** University of Toronto, **Angela Punnett** University of Toronto

Rationale/Background: The COVID-19 Pandemic has presented us with numerous challenges, including rethinking where and how our learners will acquire essential competencies. In many cases, we will have to think about how to create meaningful, engaging, and effective virtual learning experiences. This practical workshop will allow participants to explore various strategies for facilitating synchronous and asynchronous virtual learning. Common challenges such as how to adapt existing teaching and learning experiences, engage learners, teach clinical skills, and create e-learning resources will be explored, with practical examples and strategies offered. Key principles and concepts from education theory will be highlighted.

Methods: Following an interactive large group presentation, participants will have the opportunity to practice adapting existing materials or creating new e-learning resources using small group case-based learning. Small group discussions will allow for the sharing of strategies, successes and challenges around virtual teaching and learning. Following an interactive large group presentation, participants will have the opportunity to practice adapting existing materials or creating new e-learning resources using small group case-based learning. Small group discussions will allow for the sharing of strategies, successes and challenges around virtual teaching and learning.

Target audience: Medical Educators across the continuum and encouraged to attend. If this workshop is held in person, participants are encouraged to bring a mobile device.

Learning objectives: By the end of this session, participants will be able to: 1. Describe principles and concepts that can inform an approach to adapting to a virtual learning environment 2. Apply these principles and concepts in adapting curricular materials to engage learners, when teaching clinical skills, and creating e-learning resources 3. Share strategies, successes and challenges around teaching and learning online with participants from different contexts.

April 19th, 2021 - 15:30 EST

WF1-1, 60880

Blueprinting - Cooking Up Recipes for Valid Assessments

Kien Dang University of Toronto, **Katina Tzanetos** University of Toronto, **Carla Garcia** University of Toronto, **Susanna Talarico** University of Toronto

Rationale/Background: Content validity in assessments is necessary to ensure learners have achieved the knowledge and skills outlined in a curriculum's learning objectives. However, assessments are often compiled in inconsistent ways. Blueprinting assessments avoids a haphazard or inconsistent approach to test generation, and helps to create the most effective tests to measure the success of students in mastering the material in a course. Blueprinting assessments promotes content validity, optimizes alignment between learning objectives and assessment, and ensures consistency of tests between iterations. In this workshop, participants will engage in a process of blueprinting an assessment, with the eventual goal of creating a blueprint for assessments for their course.

Methods: The workshop will begin with discussion regarding participants' current practices in test creation, followed by a short didactic presentation of the rationale for and demonstrate a process for creating a blueprint, highlighting important considerations. Participants will then have the opportunity to work in small groups to discuss their current practices in creating exams and engage in the process of creating an assessment blueprint.

Target audience: The target audience includes undergraduate course directors, junior faculty involved in test creation, residents.

Learning objectives: By the end of this workshop, participants will be able to: 1. Define blueprinting. 2. Discuss the reasons for blueprinting an assessment. 3. Describe a process for creating a blueprint. 4. Engage in the initial steps of blueprinting.

WF1-2, 59508

Leveraging open scholarship in medical education with Wikipedia

Denise Smith McMaster University, **Lane Rasberry** University of Virginia

Rationale/Background: In conventional health communication and education, expert organizations take for granted that the quality of their information is high. However, the distribution and dissemination of this information to relevant audiences can be challenging.

Wikipedia has the opposite challenge. It has a large audience requesting particular information but seeks expert partnerships to develop its content. English Wikipedia is the 7th most accessed web page in Canada and at the end of 2013, its medical content had collectively received 4.8 billion page views (Heilman, 2015). We will review the precedent of experts and organizations sharing medical information through Wikipedia and measure the impact of these efforts. We will provide participants with an opportunity to explore Wikipedia's medical information, their potential to help build its medical content, and its utility as a tool in educating medical students who can learn to find, critically appraise, and summarize in plain language, high-quality evidence.

Methods: A brief introduction to the utility of Wikipedia as an educational tool (12-15 minutes) followed by small-group editing training with guidance from the instructor(s)

Target audience: Anyone curious about Wikipedia, its role in medical education, its internal review system, its reliability and utility, or a gentle introduction to editing. No experience required. Experienced editors are welcome.

Learning objectives: Participants will be able to add one sentence and one citation to Wikipedia and access Wikipedia's specialized educator tools. Skills taught include: Monitoring students during editing projects; Publishing in Wikipedia; Measuring readership and impact; How to query Wikipedia's general reference structured data

WF1-3, 60249

Practicing Structured Feedback For Clinician Teachers Through Simulation

Quang Ngo McMaster University, **X. Catherine Tong** McMaster University, **Sharon Bal** McMaster University, **Krista Dowhos** McMaster University, **Aaron Geekie-Sousa** McMaster University, **Isla McPherson** McMaster University

Rationale/Background: The Advocacy-Inquiry(A-I) model of debriefing has been well described in the simulation literature and has been proposed as a framework for structured feedback. A-I has theoretical underpinnings in the ideas of Reflective Practice. This theory of learning suggests that the learner reflects on a gap or problem that may be identified during a new experience or unexpected difficulties encountered during a familiar experience. This reflection is rooted in a constructivist paradigm, where a learner integrates and interprets new knowledge in the context of past experiences, previous knowledge and attitudes. Giving learner feedback is one of the most important tasks of the clinician teacher. Very few teachers have the opportunity to be directly observed giving feedback, and to receive real-time constructive advice on their techniques. Our team aims to provide a safe and simulated environment, where participants will have a valuable simulated experience in giving feedback effectively, especially in more challenging scenarios.

Methods: In this workshop, we first provide a background on elements of effective feedback, and review A-I as a feedback technique. We bring trained standardized learners to the workshop (virtually or in-person). We allocate the majority of our time to small group case work. Participants will watch short videos of standardized learners performing a clinical task, then be asked to give them feedback in real time immediately afterwards. We start with a simple exercise to clarify the technique. We then move on to common challenging scenarios, including learners displaying professionalism issues and learners lacking insight. Experienced facilitators provide coaching and feedback to the participant and allow for opportunities of repeated attempts. Participants also benefit from receiving feedback directly from the standardized learners. The workshop is well suited to run in person or virtually, where participants will be organized into smaller groups with paired facilitator and standardized learner.

Target audience: All teachers who provide feedback to learners.

Learning objectives: At the end of the workshop participants will be able to: 1. Identify characteristics of effective feedback. 2. Define Advocacy-Inquiry as a technique for providing feedback. 3. Apply Advocacy-Inquiry technique with standardized learners in a simulated interaction.

April 20th, 2021 - 10:00 EST

WG1-1, 60884

Ready to Act: Using Storytelling and Role Play to Build Action-Oriented Equity Competencies in Undergraduate Medical Education and Continuing Professional Development

Lloy Wylie Western University, **Lana Ray** Lakehead University, **Danielle Alcock** Western University

Rationale/Background: Systemic racism in the health care system undermines access and quality care for Indigenous

people. The consequences of this can mean life or death, as we have seen for Joyce Echaquan and Brian Sinclair. Research has demonstrated a range of gaps in addressing the varied health care needs of Indigenous populations (Alan and Smylie, 2015; Wylie and McConkey 2019). The aim of this workshop is to demonstrate ways to use storytelling and arts to build competencies among medical students, residents and physicians to advance health equity. There is a need to improve knowledge and practice through targeted educational initiatives that give providers concrete recommendations to improve equity in practice. Such actions include understanding and correcting their own biases, improving their knowledge, and ensuring system-wide supports for culturally safe and appropriate care. We explore the use of storytelling and arts based education as a way to build understanding and among health professionals and students (Ray 2012).

Methods: This workshop uses storytelling, role play and interactive case exercises to demonstrated strategies for building competencies in providing culturally safe, quality health care for Indigenous people. This workshop will provide experiential learning opportunities that demonstrate strategies that build concrete skills. In addition, the workshop will support participants to develop storytelling and theatre-based training activities in their own health service settings. The presenters will illustrate a range of challenges facing Indigenous people, both within the health care system and more broad social determinants of health. Narratives drawing on examples from health care experiences that demonstrate challenges will be presented. Participants will work in teams to explore the issues in the cases, reflecting on determinants of health through role play exercises. The workshop facilitators will guide a reflection and explore ways participants can apply this approach to their own settings.

Target audience: This workshop is oriented to health care providers, health care educators, and others involved in training health professionals.

Learning objectives: 1. To identify the range of challenges that undermine health equity. 2. To demonstrate evidence based exercises that can improve health care providers' attitudes, knowledge and skills in promoting culturally safe changes in health care delivery 3. To support participants in developing educational and workplace strategies applicable to their own setting

WG1-2, 60638

The Art of Recruiting Patient Partners

Annie Descoteaux Université de Montréal, **Marie-Pierre Codsi** Université de Montréal, **Philippe Karazivan** Université de Montréal, **Clara Dallaire** Université de Montréal, **Alexandre Berkesse** Centre d'excellence sur le partenariat avec les patients et le public (CEPPP), **Luigi Flora** Centre d'innovation du partenariat avec les patients et le public (CI3P), RETINES, Université Côte d'Azur, **Vincent Dumez** Université de Montréal

Rationale/Background: The field of patient partnership represents a major paradigm shift in medical pedagogy by considering the patient as an expert of life with illness (Karazivan et al. 2015). Actors in healthcare education are now faced with finding experienced patients to contribute to course and curriculum development in a meaningful way. The Center of Excellence on Partnerships with Patients and the Public (CEPPP) of University of Montreal have developed a workshop to train for patient partner recruitment, based on the CEPPP's patient partner competency framework (PCF) and patient partner recruitment guideline. This workshop has been the object of a publication (Jackson & al., 2020).

Methods: This workshop is adapted from the Learning by Concordance (LbC) model (Fernandez, 2016). It uses LbC as an in-presence discussion tool focused on the possible interpretations of audio-visual recordings, framed by the PCF. After a brief presentation of the context, participants are given a copy of the PCF and a series of questions in the LbC format. Participants then watch a short video recording of a patient recruitment interview. A group discussion is facilitated for each question, focusing on the PCF. This is repeated with three video recordings.

Target audience: All healthcare professionals responsible in health care organization for a patient partnership unit, all researchers in the field of patient oriented research and all faculty members developing new pedagogical content or restructuring academic cursus.

Learning objectives: Acquire basic understanding and basic skills of competency-based patient partner recruitment.

WG1-3, 60287

Culinary Medicine: Cooking-up Nutrition Competence and Wellness Among Physicians

Joel Barohn University of British Columbia, **Lee Rysdale** Northern Ontario School of Medicine, **Chelsea McPherson** University of Toronto, **Julia MacLaren** Alberta Health Services

Rationale/Background: Building on the CCME John Ruedy Education Innovation Symposium (2019) by the Northern

Ontario School of Medicine (NOSM), there is growing interest and opportunity to integrate Culinary Medicine (CM) into Canadian medical education and faculty development. The objective of CM as a component of medical school curricula is to simultaneously increase nutrition competence of medical trainees and improve their health behaviours. As a proven interprofessional education model used in over 50 US medical schools, CM is an innovative therapeutic lifestyle medicine approach that supports positive dietary and psychosocial patient outcomes. This virtual or face-to-face workshop will illustrate the value of CM as a layered knowledge translation strategy for physicians, medical trainees and educators, and demonstrate application in clinical practice settings. Attendees will learn to use simple recipes alongside core food and nutrition messages to build fundamental food skills and nutrition knowledge to influence behaviour change. Additionally, they will learn strategies on how to make their CM program practical and sustainable.

Methods: A team of registered dietitians and chefs will facilitate an introductory CM workshop including a food skills demonstration followed by participants preparing two quick and healthy recipes. While participants enjoy the prepared dishes, a mini-lecture on a nutrition topic/condition will be delivered with polling quizzes, small and large group discussions, and case studies.

Target audience: Physicians, residents, medical students, educators

Learning objectives: 1. Identify how CM can improve medical learner and physician nutrition competence and support dietary behaviour change. 2. Describe the opportunities and challenges to implementing a CM program in Canadian medical education. 3. List three components of successful CM programs.

April 20th, 2021 - 11:30 EST

WG2-1, 60917

Fostering a Humanistic Culture of Care: Understanding Interprofessional Teams as Complex Adaptive Systems

Wendy Stewart Dalhousie University

Rationale/Background: Healthcare is primarily delivered using team-based care. Each discipline has their own distinct training and clinical practice framework, and strongly identifies with their own profession leading to conflict and tribalism in teams. This in turn impacts patient care and the health and wellbeing of team members. The culture of healthcare is challenging, with an ongoing hierarchy and lack of support for one another. The pressures of 24/7 connectedness through technology and increasing demands is causing burnout. We need to consider ways in which to care for one another as well as our patients if we are to maintain our own health and passion for our respective professions. Changing culture is challenging and can begin with our immediate colleagues. This workshop will provide participants with opportunities to engage in humanistic interactions with one another and consider practical strategies to change culture in their own workplace from the perspective of complex adaptive systems theory.

Methods: A brief didactic presentation will introduce participants to complex adaptive systems theory, identify the challenges of healthcare culture and frame how this might be changed from a humanistic perspective. Using pair share, participants will consider different aspects of working in teams from a complex adaptives systems perspective. In small groups, they will apply humanistic approaches to engaging one another in real-life based scenarios and apply one of the approaches to a challenging situation in their own workplace setting. The workshop will conclude with a facilitated larger group discussion to allowing sharing of ideas.

Target audience: Learners and practitioners involved in teams based care

Learning objectives: 1. Define what is meant by a complex adaptive system 2. Identify what it means to feel supported in an interprofessional team setting. 3. Practice humanistic approaches for engaging interprofessional colleagues in a productive and supportive dialogue 4. Apply one of the approaches to an issue in their own workplace setting

WG2-2, 60667

Leveraging Data Visualization and Data Storytelling in Programmatic Assessment and Program Evaluation

Richard Pittini University of Toronto, **Yuxin Tu** University of Toronto, **Pauline Pan** University of Toronto

Rationale/Background: Research in cognitive sciences indicates that humans have been telling stories for thousands of years and human brains are wired to process and respond to them. However, limited research focused on the interplay between data storytelling and medical education. Both Programmatic Assessment and Program Evaluation in medical education require collecting a large volume of data and making informed decisions using such

data. Currently, the ways of presenting and communicating student assessment data to stakeholders and program evaluation data to decision-makers are still lacking. In the past four years, our office explored using data visualization and storytelling tools and techniques in data analysis and presentation to support high-stake student progress decision-making and identifying areas of improvement as a part of the Program Evaluation Model.

Methods: We will spend the first 5 minutes presenting the theories and best practices in data visualization and data storytelling. We then will spend the next 15 minutes displaying a few visualization examples and highlighting the lessons we learned from our journey. We will divide participants of different levels of expertise into small groups of 4-6 to engage in two visualization and storytelling design activities that will last 60 minutes. We then will host a 10-minute Q&A session.

Target audience: Senior executives, department heads, scientists, data practitioners, staff who are involved in Medical School assessment and evaluation

Learning objectives: • data visualization and storytelling opportunities in student assessment and program evaluation • Identify Learn tools and techniques present quantitative information effectively • Feel confident in engaging and persuading your audience with storytelling

WG2-3, 60593

Owning Allyship: Leading through the tensions of racism and relationship

Lyn Sonnenberg University of Alberta, **Victor Do** University of Toronto, **Constance LeBlanc** Dalhousie University, **Jamiu Busari** Maastricht University | Dr. Horácio E. Oduber Hospital

Rationale/Background: Now, more than ever, we need to actively address racism within medical education and healthcare delivery. However, many educators are left not knowing what to do or say. Allyship is the practice of emphasizing social justice, inclusivity, and human rights by those in a privileged position or group, to advance the interests of an oppressed or marginalized group. Being an ally does not mean you fully understand what it feels like to be oppressed; it means you're taking on the struggle alongside those directly impacted. Since allies often have and recognize more privilege, they are powerful voices alongside oppressed ones. Together, we will explore three powerful racial themes (microaggressions, moral injury, and implicit bias) and provide their counterbalance response (vigilance, near-peer support, and advocacy) within the medical education and healthcare contexts. We

will conclude with practical calls to action for implementation into circles of influence.

Methods: We will actively integrate the audience's perspective through dialogue and narrative, using case studies, powerful stories, and lived experiences. Using challenging cases, we will highlight the tensions between being an ally and maintaining relationships with those we are aiming to enlighten. Participants will be invited to share their experiences and stories, integrated within case-study discussions. In this safe space we can explore, acknowledge, and reflect collectively, while co-creating tools to address racism and create allyship.

Target audience: All

Learning objectives: 1. explore what is meant by allyship 2. identify actionable strategies to address the tensions between addressing racism while preserving relationships 3. recognize privilege and use it to amplify underrepresented voices

April 20th, 2021 - 15:30 EST

WH1-1, 60920

Bias and Residency Selection - Supporting Diversity in Postgraduate Medical Education

Amanda Condon University of Manitoba, **Jackie Gruber** University of Manitoba, **Ming-Ka Chan** University of Manitoba, **Sara Goulet** University of Manitoba, **Lisa Monkman** University of Manitoba

Rationale/Background: Increased focus in recent years on diversity in Undergraduate Medical Education - changes to admissions processes have helped to increase representation of historically underrepresented groups in Medical School. What is being done to ensure that this approach carries on into Post Graduate Medical Education? How is diversity being supported during the residency selection process? What policies are in place that may disadvantage certain candidates in their applications to different programs? This workshop will explore bias and how bias may influence residency selection policies and decisions.

Methods: The workshop will consist of an introduction to diversity in medical education and health workforce followed by a brief review of bias and implicit bias training (IBT). Workshop participants will then complete an IBT exercise and debrief as a group. A discussion about implicit bias and how this may impact residency selection process and policy will occur, with participants working together to highlight opportunities to mitigate bias within the processes within their own institutions. Finally,

participants will review elements of the CaRMS "Best Practices for Applicant Selection" through the lens of potential bias and consider how programs may optimize their criteria to support diverse learners. This workshop will consist of a short didactic component and will primarily be focused on discussion and application of implicit bias training to resident selection process.

Target audience: Program directors and all involved in resident selection

Learning objectives: Identify policies and processes related to resident selection that may disadvantage diverse applicants.

WH1-2, 60704

Supporting Wellness through Reflection and Dialogue
Nirit Bernhard University of Toronto, **Susanna Talarico** University of Toronto

Rationale/Background: The Royal College challenges educators to prepare physicians who are able to balance personal and professional priorities, incorporate self care, and develop personal and professional awareness and insight. Never has this concept been more critical than during the current pandemic. This workshop will present our approach to supporting learner wellness through reflection and dialogue within a longitudinal curriculum. Students engage with residents and faculty and the formal curriculum during scheduled group meetings over 4 years. Participants are provided with a description of the thematic session and companion pieces, and come prepared to describe an experience and their reflection on it. Students are also required to meet with faculty twice yearly for progress review meetings, and wellness is discussed as an important element of their personal learning plan. The informal curriculum, of relationship building, is perhaps the most effective component of the curriculum.

Methods: Our approach to supporting wellness through a Portfolio curriculum will be described through a didactic presentation. Participants will then have the opportunity to simulate a small reflective practice group. Following a demonstration, they will also engage in a coaching conversation around wellness. Participants will discuss how this approach might be adapted to their own education context.

Target audience: Medical educators and trainees at all levels

Learning objectives: As a result of attending this workshop, participants will be able to: 1. Describe the key components of a curriculum that supports student wellness 2. Participate in/facilitate a small reflective practice group and coaching conversation 3. Leave with the ability to implement a similar curriculum within their own program

WH1-3, 60586

Teaching Resilience through Peer Group Reflection.
Mairi Scott Centre for Medical Education, School of Medicine, University of Dundee

Rationale/Background: The Covid-19 pandemic crisis with the inherent uncertainly around clinical decision making has led to a significant increase in work-related stress, sickness absence and burnout. Medical educators can make a difference by focusing on educational solutions to shift healthcare culture towards one of learning rather than overwhelm. This workshop will enable medical educators to develop additional skills in enabling their learners to undertake critical reflection of patient care in a creative and interactive way and so become more resilient

Methods: Delegates will explore effective methods of small group peer learning using a 'values-based' Balint style approach to reflection, analysis and understanding of their own clinical experiences and enabled to develop facilitation skills needed to achieve deep learning. The workshop will be delivered in phases (all interactive); 1. Explanation and exploration of the technique known as Balint type case-based learning 2. Small group work 1 & 2 plus de-brief on process and facilitation 3. Whole group review of learning with agreed plans for further self-development.

Target audience: Medical Educators involved in teaching undergraduates, postgraduate specialty trainees and established professionals undertaking CPD activities.

Learning objectives: Participants will experience and gain skills in teaching others to; • Develop an approach to optimizing resilience to enhance professional practice and development. • Gain high level skills in reflective practice based on enabling group discussion and critical analysis of the uniqueness of the clinician-patient interaction. • Develop small group leadership skills in using awareness-raising questions (ARQ's) to enable in-depth critical analysis and reflection.

Assessment

LP1 - 02, 60301

Assessment of pink elephants.

Jinelle Ramlackhansingh Memorial – University of Newfoundland, **Fern Brunger** Memorial – University of Newfoundland

Background/Purpose: Medical students learning about CanMEDS roles can be assessed using written reflection assignments. Reflection on learning is important for identifying learning needs and integrating knowledge. Assessment regulations require rubrics detailing the outcomes and assessment of assignments are to be provided to students. Education best practices are that faculty feedback then corresponds to the expectations outlined in the assessment rubric. This presentation looks at the use of rubrics in assessment.

Methods: This paper is based on findings from a longitudinal study examining professional development amongst pre-clinical medical students at an Atlantic Canadian university. The study employed a critical ethnographic design using a combination of participant-observation research and monthly focus groups over two years. The study involved collecting student accounts of their formal and informal learning experiences, including their observations of and opinions on faculty assessment of reflective assignments.

Results: The students reported having rubrics was a disadvantage. The students spoke about how abstract their writing was like pink elephants, to address the expectations of the rubrics. The assignments failed in their usefulness as a tool to help the students develop critical thinking. Instead, the students chose to write to fit the rubric and pass the assignment. The students found the feedback they received was too limited to help guide their learning and correct their mistakes.

Conclusions: The rubrics instructed the students on what to write rather than allowing the students to reflect on their learning. The lack of useful feedback could be due to those teachers themselves are not trained to give constructive feedback.

LP1 – 03, 60711

Theoretical or Practical? Evaluation of Entrustable Professional Activities (EPA) in the 2019–2020 Internal Medicine Cohort

Lorenzo Madrazo Western University, **Jennifer Theresa DCruz** Western University, **Dr. Sheri-Lynn Kane** Western University, **Natasha Correa** Western University

Background/Purpose: Implementation of competence-by-design (CBD) through completion of Entrustable Professional Activities (EPA) aims to enhance resident performance and ultimately, patient outcomes. Whether electronically completed EPAs translate into meaningful learning assessment remains uncertain. We aimed to evaluate the quality of EPA feedback completed by faculty and residents.

Methods: We assessed the quality of feedback from all EPAs for PGY1 Internal Medicine Residents from July 2019–May 2020 at Western University. Based on literature review, we assessed feedback quality on four domains: timeliness (<7days duration from clinical encounter to EPA completion), task-oriented (yes or no), actionability (very, semi, or not actionable), and polarity (positive, negative, mixed, or neutral). Four independent reviewers were blinded to names of evaluators and learners, and were randomized to assess the four variables outlined.

Results: A total of 2,471 EPAs were initiated, 80% were completed, of which 39% were completed by faculty and 61% by residents. Of all feedback received, 47% of EPAs were timely, 85% were task-specific, 83% consisted of positive feedback, 4% mixed, and 12% neutral. Thirty percent were semi- or very actionable.

Conclusions: In the first year of implementation a cohort of 34 PGY1s attempted 2,471 EPAs with a completion rate of 80%. Feedback is generally task-oriented, not timely, and only actionable 30% amount of time. Residents bear a large burden for both obtaining and assessing EPAs. The timeliness and actionability of feedback will require more resident and faculty development in order to achieve the goals of CBD.

LP1 – 04, 60753

Developing validity evidence for a clerkship competency-based written communication skills rubric

Avrilynn Ding Queen's University, **Eleni Katsoulas** Queen's University, **Cherie Jones-Hiscock** Queen's University, **Michelle Gibson** Queen's University, **Theresa Nowlan Suart** Queen's University, **Andrea Winthrop** Queen's University

Background/Purpose: Although written communication skills are a key physician competency taught in undergraduate medical education, it remains challenging to assess, particularly in clerkship. This study contributes to the validity argument for a competency-based written communication assignment (WCA) rubric by providing evidence for purpose & construct validity.

Methods: A semi-structured focus group was conducted with the graduating 2020 class, audio-recorded, & transcribed verbatim. Questions were designed to stimulate discussion on the rubric's purpose, fitness for purpose, & factors impacting its effectiveness. The transcript was coded by one reviewer with a constructivist approach, using Stobart's validity framework as a theoretical framework. The codebook was modified iteratively. A second reviewer coded a random 25% transcript sample with high agreement. Codes were grouped into themes that reflected the student experience. Member checking verified findings.

Results: Six students participated in the one-hour focus group. They represented 17 completed WCAs, including discharge summaries, consult notes, & clinic notes. Three core themes emerged: (1) Students accurately understand the rubric's purposes; (2) The rubric captures most skills involved in medical documentation; (3) Preceptor feedback habits, documentation processes, & student approaches to assessment requests influence the value of feedback the rubric produces. Suggested improvements were to incorporate adequacy of documentation for medicolegal purposes & pertinence to discipline into rubric criteria, & add submission guidelines.

Conclusions: These findings suggest that the rubric measures what it was intended to measure, & captures intended purpose. The analysis will inform future revisions of the rubric, including triangulation with faculty perspectives.

LP1 – 05, 60907

Examining resident-entered vs preceptor-entered low stakes workplace-based assessments in Competency-based edical Education

Shelley Ross University of Alberta, **Jonathon Lee** University of Alberta

Background/Purpose: While assessment by preceptors in competency-based medical education (CBME) is crucial for resident development, CBME is also intended to improve accuracy of learner self-assessment. Despite continued adoption of CBME as a preferred approach to physician training, it is unclear to what extent residents should be responsible for their own assessment. Our study contrasted the content of fieldnotes (low stakes narrative assessments) that were learner-created (i.e., self-assessments) vs preceptor-created. We compared these two categories of fieldnotes to shed light on the value of self-assessments in CBME. We hypothesized that learner-created and preceptor-created fieldnotes would; 1) differ in quality of the narrative feedback; 2) not greatly differ with respect to a resident's progress level in a competency, and; 3) address competencies with comparable frequency.

Methods: This study used secondary data analysis of archived fieldnotes generated by residents and preceptors in a family medicine residency program in Canada. Non-parametric statistical tests were used to evaluate differences between learner self-assessment fieldnotes and preceptor-entered fieldnotes in feedback quality, indicated progress level, and competencies addressed.

Results: Quality of feedback documented by residents in self-assessments was significantly lower than that documented in preceptor assessments. Second year residents overestimated their own progress levels in self-assessments in a small but significant manner. Some small but significant differences were found between residents and preceptors in the frequency of specific competencies addressed.

Conclusions: Resident self-assessments were reasonably consistent with preceptor assessments, suggesting that the benefits of guided low-stakes self-assessment (e.g., training in self-regulation, program efficacy monitoring) outweigh the potential risks.

LP1 – 06, 60489

EPAs in core Internal Medicine: from the concept to the implementation

Jean-Philippe Rioux Université de Montréal, **David Bélanger** Université de Montréal, **Jean-Michel Leduc** Université de Montréal

Background/Purpose: Entrustable professional activities (EPA) have been introduced in core internal medicine residency programs in Canada in July 2019. Studies show that the implementation of EPAs is facing a lot of challenges and that the benefit of this method has to be closely evaluated. The perception of core internal medicine residents of Université de Montréal (UdeM) about the content and the implementation of EPAs was assessed.

Methods: An online survey was distributed by email to all PGY1 core internal medicine residents of UdeM with questions regarding EPA frequency in different subspecialty rotations, general perception of EPAs. Relevance, feasibility and understanding of EPAs were assessed using Likert-scales. Descriptive statistics and frequency distributions were then computed and compared between rotations.

Results: Our response rate was 65%. Results show a variability in the number of EPAs completed by week, from an average of 0.5 in endocrinology to 1.6 in nephrology. 86% of participants noted that their work burden was increased by EPAs, with lack off comprehension by the supervisors identified as an important issue by 71 %. Our results identified EPA 2.7 (reflective work about learning needs) as difficult to understand, with lower relevance and a too high quantity of observations needed. Some other EPAs were identified with low feasibility due to few supervised clinical opportunities.

Conclusions: Implementation of EPAs is variable among subspeciality rotations in internal medicine, possibly related to the familiarity of the supervisors with the concept. Changes could still be made to reduce the complexity and the required number of some of the EPAs.

LP1 – 07, 60498

Field Notes: Factors Impacting Residents' Learning in Manitoba

Gayle Halas University of Manitoba, **Teresa Cavett** University of Manitoba, **Nicole Zaki** University of Manitoba

Background/Purpose: Family Medicine (FM) Residency Programs are tasked with developing competent physicians, covering multiple domains of patient care and an extensive body of medical knowledge situated in diverse settings. In accordance with Competency-Based Medical Education principles, FM programs employ multiple assessment modalities including resident self-assessment through Field Notes (FNs). This study explored the use of FNs at the University of Manitoba and how these have shaped residents' learning.

Methods: This multi-method study examined 520 FNs from 16 recent graduates. Quantitative analysis (frequencies and means) enabled descriptions and comparisons between residency training sites; four themes emerged from inductive content analysis.

Results: Residents' FNs explored 91 of 99 of the CFPC Priority Topics. The most frequently described Topics were Skin Disorders, Infections, Depression, and Pain Management. Topics addressing complex psychosocial issues (Domestic Violence, Grief, Infertility, Lifestyle, Obesity, Parkinsonism, Rape/Sexual Assault and Somatization) were absent from this data set. Few FNs addressed the domains of Care of First Nations, Inuit, and Metis; Care of the Vulnerable and Underserved; and Behavioural Medicine and the CanMEDS-FM roles of FM - Procedural Skill, Leader/Manager, and Professional. Four themes (Patient-Centered Care, Patient Safety, Achieving Balance, and Confidence) were identified from residents' narratives.

Conclusions: Vygotsky's Sociocultural Theory of Cognitive Development was utilized as a lens to examine factors influencing resident learning. Residents' discomfort with certain topics is demonstrated through avoidance of reflecting upon certain competencies in FNs thus impacting skill acquisition. Further research should explore factors influencing residents' selection of FN topics and how to best assist residents in becoming competent, confident practitioners.

LP1 – 08, 60563

The self-feedback of overconfident and underconfident medical residents: a qualitative analysis

Maryam Bagherzadeh Queen's University, **Heather Braund** Queen's University, **Tim Chaplin** Queen's University

Background/Purpose: Self-assessment is a core component of competency-based medical education that draws on different sources to reflect on one's own skills and abilities. Self-confidence is an important element in the process of self-assessment, although the relationship between these variables is poorly understood. We explored the qualitative themes provided in the self-

assessment rationale between over- and underconfident residents.

Methods: Following the completion of a simulation-based resuscitation course in 2017, 41 residents completed a 4-scenario summative OSCE. After each scenario, both self-assessment and assessment by an attending physician was completed and involved an entrustment score and narrative rationale. Learners were assigned to a confidence group based on the difference between the faculty-assigned and self-assessment scores for each scenario. Ten residents were assigned to each group and their narrative rationales were thematically coded for differences in content and quality of feedback.

Results: The content of the self-feedback differed between the two groups. Overconfident residents highlighted areas of speed and broad situational management, while underconfident residents commented on lack of support, and a need to improve communication, diagnosis, and code blue management. Further differences were noted in the quality of self-feedback. While both groups highlighted areas of investigation, management, and treatment, the underconfident residents documented higher quality comments that were detailed and granular.

Conclusions: The findings of this study provide insight into the areas of focus and quality of self-feedback between learners with different levels of confidence. This can have valuable implications for debriefing and curriculum design within the CBME curricula.

LP1 – 09, 60724

Analyzing patterns of performance across the clerkship learning environment

Avik Sharma University of Alberta, **Chaitanya Gandhi** University of Alberta, **Hollis Lai** University of Alberta

Background/Purpose: Clerkships traditionally span two years of medical school where students integrate their basic science knowledge and skills in clinical rotations. There is evidence in the pre-clerkship setting that a score received by a medical student in weekly team-based learning (TBL) assessments influences their performance in the subsequent assessment. However, the investigation of such trends has not yet been conducted in the clerkship context. This is relevant because, unlike TBL, clerkship assessments have a higher weighting towards final clerkship grades.

Methods: A secondary analysis of anonymized clerkship assessment data was conducted on six core clerkships between 2018 and 2019. A total of 10325 form submissions for 139 medical students were analyzed for the study. After modelling, repeated measures ANOVA and Paired t-tests analyzed for performance within clerkships, while time-series analyses were used to analyze trends across clerkships. Odds ratios were also used to determine the likelihood of score improvement between the first and each successive clerkship.

Results: The score patterns of students in clerkship evaluations indicate that there is a significant improvement as they progress through a clerkship. Similarly, improvement in performance is also noticed across successive clerkships and for different competencies. Lastly, the likelihood of students that obtain the highest score possible on clerkship assessments increases with subsequent clerkships.

Conclusions: These score patterns are concordant with pre-clerkship patterns of performance and suggest that students may modulate their future performance based on previously received evaluation scores.

LP2 – 01, 60488

Establishing a Holistic Framework for Physician Stress

Sydney McQueen University of Toronto, **Melanie Hammond Mobilio** University of Toronto, **Carol-anne Moulton** University of Toronto

Background/Purpose: Physician stress has been identified as destructive to individual and system wellness and performance, however we continue to struggle to address stress in practice. Challenges arise from the lack of a shared definition of 'stress'-which is idiosyncratic and multifaceted-as well as limitations to traditional, reductionist approaches to understanding stress that seek linear cause-effect relationships. We require a cohesive framework for organizing multidisciplinary knowledge for studying and tackling stress. The present study builds on the cognitive appraisal theory of stress to establish a holistic physician stress framework.

Methods: Constructivist grounded theory was used to set aside preconceived definitions of 'stress' and explore the holistic subjective experience with the individuals experiencing the stress. 24 semi-structured interviews were conducted to explore distress, followed by 19 interviews on eustress. Participants were staff surgeons at the University of Toronto, purposively sampled for experience levels and practices. Data were coded and analyzed iteratively by three researchers until no new themes relating to the emerging model were identified.

Results: We present a conceptual framework for physician stress that includes: 1. Distress and eustress as two holistic experiences; 2. The multiple dimensions contributing as both antecedents and components of the stress experience (physiological, cognitive, emotional, sociocultural, environmental) and; 3. Interrelationships and dynamic feedback between component parts.

Conclusions: A holistic framework may be used in conjunction with methods from complexity science to identify novel approaches to stress research, and to organize efforts for countering distress while supporting eustress in practice.

LP2 – 02, 60573

Perceptions of Health and Wellness Impacts on Residents in their Certification Exam Year

Tara Riddell McMaster University, **Natasha Snelgrove** McMaster University, **Michelle Onlock** University of Toronto, **Laila Nasser** McMaster University, **Kaif Pardhan** University of Toronto

Background/Purpose: Residency training in Canada includes a certification exam administered by the Royal College of Physicians and Surgeons of Canada or the College of Family Physicians of Canada. Residents work clinically while studying. Studying for this exam may impact residents' health and wellness. Our objectives were to explore (a) the residents' certification exam year experiences, (b) mitigating strategies used to enhance health and education, (c) retrospective perceptions of faculty on their certification exam year, and (d) faculty perceptions of certification exam year experiences of current residents.

Methods: Qualitative description methodology was used for this study. Participants were residents and supervisors from McMaster University and the University of Toronto. In depth, semi-structured one-on-one interviews were conducted by one of the investigators. Each was transcribed, reviewed and coded using content analysis by two members of the investigating team.

Results: Fear and stress were identified in residents' personal and professional lives including finances, career planning, and relationships. Health impacts were identified with heightened anxiety, loss of interest, weight gain, and poor eating habits. Negative impacts were exacerbated by observing predecessors' stress, high stakes nature of the examination, and expectation of peak clinical performance while studying. Mitigating factors included supportive personal and professional networks, norming of the examination as creating knowledge

foundation for practice and shared community goal of resident success.

Conclusions: This study has identified unique challenges that residents face in their exam year. A focus on mitigating factors will be helpful to ensure physician wellness during transition to practice.

LP2 – 03, 60256

Infographic to optimize the learning environment in the operating room for medical students undergoing their anesthesia rotations

Dong An University of Toronto, **Anita Sarmah** University of Toronto

Background/Purpose: Mistreatment of medical learners is pervasive and well documented. A 2014 meta-analysis of 59 studies examining the prevalence of mistreatment found that 59.4% of medical trainees had experienced at least one form of mistreatment during their training. Mistreatment leads to decreased performance, increased burnout, and worse patient care. Medical students perceive mistreatment to include both "incident-based" and "environment-based" types, where the latter is more common and associated with an overall suboptimal learning environment.

Summary of innovation: To optimize the learning environment for medical students undergoing their anesthesia rotations, the University of Toronto Anesthesia Undergraduate Medical Education Committee created an infographic titled "Medical Learners Belong in the OR". The infographic contains five key recommendations to ensure that the operating room is a safe and welcoming environment for medical students. The recommendation headings are "Respect Diversity", "Communicate Clearly", "Orientate Students", "Be Attentive", and "Welcome Questions", and include brief elaborations below each heading. The development of the recommendations was based on a conceptual framework that learning environments encompass personal, social, organizational, and physical components, which can all be improved to create a more optimal learning environment. Input was obtained from faculty, residents, and medical students. The infographic was disseminated to faculty and students via email and social media.

Conclusions: Feedback on the infographic from faculty and students have been positive, noting an improvement in the culture for learners in the operating room. Future directions include creating additional infographics for different healthcare settings outside of the operating room.

LP2 – 04, 60686

Balint Groups: An Initiative to Help Residents Better Understand the Clinician-Patient Relationship

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Background/Purpose: Balint sessions are an educational tool which allow residents to reflect on challenging experiences with the doctor-patient relationship. Guided by trained facilitators, residents consider these cases from the doctor, patient and doctor-patient perspectives together with their colleagues. Balint groups can support the recognition of the emotional complexity underlying these interactions, which in turn reduces burnout, improves patient care and team dynamics, and strengthens professional identities.

Summary of innovation: The University of Toronto Pediatrics Residency Program incorporated Balint groups into the curriculum in 2018. Supported by faculty, residents led their introduction and improvement using Quality Improvement methodology. Outcome measures included perceived comfort levels in navigating and supporting peers through challenging patient-physician encounters, and the perceived culture of support within the program. Rates of group participation were collected as a process measure. All outcome measures improved between the first and second year of Balint group implementation. Residents' comfort levels in navigating difficult patient-physician encounters increased from a mean of 2.5 (out of a 5-point likert scale) to 3.0, in debriefing complex scenarios from 3.1 to 3.9, and in supporting peers from 3.2 to 3.8. The perceived culture of peer support improved from a mean of 3.5 to 4.2.

Conclusions: Balint groups are a reflective educational tool which have a positive impact on residents' experiences navigating patient relationships. Introducing these sessions at our institution has shown an encouraging trend in improving residents' comfort levels with difficult clinical encounters and fostering a culture of support.

LP2 – 05, 60805

Fostering medical student wellness and resilience in a virtual environment

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Background/Purpose: Committed to promoting wellness within the University of Toronto's Medicine program, Student Health Initiatives and Education (SHINE) works in collaboration with students and faculty to facilitate events that address the unique challenges faced by medical trainees, and best supports their well-being. With the emergence of COVID-19, students faced new challenges such as: disruptions to regular routines, academic anxiety from curricular changes, and risk of loneliness due to social isolation. An increased need for programming necessitated reassessment of our strategies for promoting wellness and building resiliency, most of which were originally created for a non-virtual environment.

Summary of innovation: SHINE re-imagined the delivery of support and resources by hosting regular virtual events such as fitness workouts, virtual talent shows, physician-led seminars, and games nights. Feedback from students, collected both informally and formally through post-event evaluation forms, highlighted the positive impact of our events on social facilitation, interaction, and team-building opportunities, particularly through encouraging incoming medical students to meet each other.

Conclusions: Through redesigning our programming, we learned to capitalize on the advantages of an online environment, which include equitable access to all events, convenience for speakers, increased attendance online (lower commitment, no travel time), and increased engagement (i.e., reduced fear of engagement due to anonymized polling). However, there are aspects of wellness that cannot be nurtured in a virtual environment, such as organic in-person connectedness; therefore, future goals of programming include providing students the tools for resilience and self-care that can help them cultivate these aspects in their personal lives. In conclusion, our approach to SHINE initiatives demonstrate the value of redesigning wellness programming to better support student needs during uncertain times.

LP2 – 06, 60861

Finding Flow: A Systematic Review of Cognitive Flow in Healthcare

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Background/Purpose: Cognitive flow is a state in which individuals experience heightened focus, awareness, performance, and satisfaction in their work. Although this state has been deeply explored and applied in elite sport for optimal performance, little is known about the flow state in healthcare settings. This systematic review sought to summarize the current information on flow in healthcare and identify gaps in knowledge on this concept.

Methods: An initial search using keywords related to cognitive flow, positive psychology, clinical practice, and healthcare was conducted in MEDLINE, PsychINFO and EMBASE. All articles discussing flow in healthcare disciplines published between 1806 to July 9 2019 were considered. Two independent reviewers screened all articles, and extracted data pertaining to study location, population, measures, key findings, and manuscript type.

Results: 4824 unique abstracts were identified. After title and abstract screening, 207 articles were included for full-text review. In total, 15 articles were included. Overall, there was a paucity of literature on flow in healthcare. Publications described the experience of flow in healthcare workers, potential benefits of flow, and the relationship between flow and other positive states, namely work engagement.

Conclusions: Flow is an understudied concept in healthcare. Understanding flow states in healthcare may help combat burnout, enhance career satisfaction, and promote wellness among providers. Further research is needed to more deeply understand how flow is experienced in clinical settings, and how we can support flow in individuals and institutions.

LP2 – 07, 60872

The Role of Creative Arts in Medical Education: Perspectives from Contributors of the Journal of Art and Healing

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Background/Purpose: While still an emerging field, there has been an increasing inclusion of the arts and humanities in medical curricula. The arts and humanities have been suggested to provide valuable contributions to the personal and professional development of medical students in various domains, including self-reflection, self-expression, and observational and critical thinking skills. There have been a variety of ways in which art has been introduced into medical education, such as through formal courses in narrative medicine, museum visits, and art-making workshops. Similarly, student-led initiatives that encourage engagement in creative endeavors, such as a creative arts publications, have also been suggested to provide benefits such as building appreciation for others' viewpoints and values, as well as providing a productive outlet for stress.

Summary of innovation: Murmurs: The Journal of Art and Healing is a literary and visual arts magazine organized by medical students at the University of Ottawa. The publication accepts contributions from medical trainees across Canada, aiming to showcase creative talent as well as provide a space to reflect on and share experiences in medicine. Murmurs releases annual issues focused on a key theme to inspire submissions, such as Celebrations, Journey, and Reflection.

Conclusions: Testimonials gathered from the contributing artists and writers of the sixth and seventh edition of Murmurs suggest that involvement in the arts during medical school can encourage self-reflection and allow for the development of empathic abilities. This adds to the growing body of evidence supporting the positive effects of the creative arts on medical student growth and well-being.

LP2 – 08, 60896

Experiences from a new Women in Medicine club

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Background/Purpose: While women account for more than half of graduating medical students, women physicians are outnumbered in leadership roles, more likely to experience mistreatment or harassment, and report higher burnout rates. In an effort to mitigate gender bias in medicine and promote well-being in women medical trainees, a Women in Medicine student club was established to create a safe space to discuss unique issues that affect women in medicine, share resources and provide support.

Summary of innovation: Events held by the club included informal discussion groups, several lunchtime talks, and a week of events surrounding International Women's Day. The club worked together to provide recommendations to change student mistreatment policies. An active Facebook group where club members post news and event links contributed to the development of a sense of community. The inaugural year of the club culminated in a mentorship event which brought together female physicians and medical students in a speed networking format. Anonymous qualitative feedback was solicited at the end of the event.

Conclusions: The mentorship event was met with excellent feedback from both physicians and students. Physicians enjoyed meeting students and providing career advice. Some physicians reflected that they wished there was a similar initiative in place when they were in medical school. Students appreciated insights from a variety of medical specialties, especially as it pertains to career exploration. Students and physicians alike praised the relaxed nature of the mentorship event held at a local coffee shop without the demand of clinical duties. Next steps for this new club include continuing the mentorship event in upcoming years as well as continuing to develop community and support among women medical students.

LP2-09, 60536

Development of a Policy for Addressing Resident Harassment and Discrimination by Patients and Families

Leora Branfield Day University of Toronto, **Tarek Abdelhalim** University of Toronto

Background/Purpose: Despite the high prevalence of resident harassment by patients and families in the clinical environment, as few as 4% of incidents are formally reported. Barriers to reporting include lack of knowledge of who to report to, concerns about confidentiality, and perceived lack of institutional support. Existing hospital policies to protect hospital employees are often ambiguous in their wording and application to residents. Accordingly, we developed a Harassment Working Group comprised of engaged faculty and trainees in the Department of Medicine (DoM) at the University of Toronto. Our goal was to update existing policies for reporting and addressing incidents of harassment of Internal Medicine residents by patients and their families.

Summary of innovation: We undertook an iterative process to policy development and reviewed existing policies and achieved widespread stakeholder engagement. We then involved human resource specialists and lawyers and adapted all existing procedures into a streamlined DoM policy. The policy contains a clear reporting structure and process involving the resident supervisor ("incident manager") and site manager ("trainee manager") and ensures accountability and confidentiality. The policy outlines resolution procedures focused on 1) resident support 2) resident safety and 3) filing an incident report through existing hospital mechanisms. Resident and faculty education is currently ongoing as we pilot the policy in the inpatient setting.

Conclusions: Through an iterative approach to policy development, we updated and instituted a new policy for reporting and addressing resident harassment from patients and families, with the potential to increase the ability of hospitals to appropriately identify and manage these harmful incidents.

Postgraduate

LP3 – 01, 60722

Supporting the Transition from Junior to Senior Pediatric Resident: Implementation of an Online Case-Based Interactive Educational Resource

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Background/Purpose: The transition from the role of junior to senior resident is an important milestone in pediatric residency training. A needs assessment survey of University of Alberta pediatric residents suggested that the junior to senior transition is a significant source of anxiety for pediatric trainees. There is a paucity of formal educational resources for helping residents to develop

skills and foster confidence as they prepare for overnight and daytime senior responsibilities.

Summary of innovation: We developed an asynchronous online interactive case-based resource to support pediatric residents transitioning to the senior role. Six modules were developed in an online learning platform, each focused on a transition-related skill identified as important in the needs assessment. Modules addressed triaging and prioritization, time management and efficiency, handling acute situations, working with learners, acting autonomously, and managing personal stress. The resource presented realistic, non-prescriptive clinical scenarios where residents assumed the role of senior. Scenarios allowed trainees to experience common demands and challenges faced by senior residents in a simulated virtual setting, and encouraged critical thinking and self-reflection. 80% of residents accessed at least part of the voluntary resource.

Conclusions: A retrospective pre-post survey of pre-transition pediatric residents demonstrated reduction in self-reported transition-related anxiety after use of the resource (n=7, survey response rate 70%). Residents also reported increased confidence in the six transition-related skills addressed suggesting that an online case-based interactive educational resource can be effective in helping pediatric trainees to feel more confident and less anxious about this key transitional stage.

LP3 – 02, 60797

Perceptions of and Barriers to Competency-Based Education

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Background/Purpose: Competency-based education (CBE) has been implemented across Canadian post-graduate medical training programs through Competence By Design (CBD). We describe our initial experiences, highlighting perceptions and barriers to facilitate implementation at other centers.

Methods: An anonymous online survey was administered to faculty and residents transitioning to CBE (138 respondents) including 1) Queen's Residents (QR)[n= 102], 2) Queen's Faculty (Program Directors and CBME Leads) [n=27]and 3) Canadian Neurology Program Directors (NPD)[n = 9] and analyzed the data using descriptive and inferential statistical techniques.

Results: Perceptions were favorable ($\bar{x}$ = 3.55, SD = 0.71) and 81.58% perceived CBE enhanced training; however, perceptions were more favorable in faculty. QF indicated that CBE did not improve their ability to provide negative feedback. NPDs did not perceive their institution had adequately prepared them. QR did not perceive improved quality of feedback. There was variability in barriers perceived across groups. NPDs were concerned about access to information technology. QF were concerned about resident initiative. QR felt assessment selection and faculty responsiveness to feedback were barriers.

Conclusions: Our results indicate Faculty were concerned about reluctance of residents to actively participate in CBE. Residents were hesitant to assume such a role due to lack of familiarity and perceived benefit. This discrepancy indicates attention should be devoted to: 1) institutional administrative/educational supports, 2) faculty development around feedback/assessment and 3) resident engagement to foster ownership of their learning and familiarity with CBE.

LP3 – 03, 60815

Static in the line or a full disconnect? Exploring resident perceptions and interpretations of initial competency based medical education (CBME) implementation compared to the core components of CBME

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Background/Purpose: CBD is a hybrid competency-based model that focuses on residents' abilities in relation to the competencies needed for success in practice. This model is based on five components: framework of competencies, sequenced progression, tailored experiences, competency-focused instruction, and programmatic assessment. There has been limited exploration of residents' experiences of implementation of CBD thus far. We explored residents' mental models in relation to the core components and their general experiences to identify if CBD implementation in the first 8 disciplines is occurring as it was conceptualized.

Methods: A descriptive qualitative design was used to explore and better understand the resident experiences. All residents who had exposure to CBD implementation were invited to participate. We conducted face-to-face or telephone semi-structured interviews. Interviews were digitally recorded and transcribed verbatim. Thematic analysis was used to create data-driven codes and identify

themes and subthemes. We used an iterative consensus-building process to reach saturation. Research Ethics Board approval was obtained.

Results: A total of 20/50 (40%) residents representing 6 different disciplines from the 1st(n=4) and 2nd(n=16) cohorts of CBD implementation were interviewed. Five main themes emerged: i) value of feedback; ii) strategies for successful Entrustable Professional Activity(EPA) completion; iii) challenges encountered in CBD; iv) general perceptions regarding CBD; and v) recommendations to improve on existing challenges.

Conclusions: Exploring residents' mental models of CBD core components and understanding their experiences on the implementation will help identify/disseminate successes, challenges, and future directions from the residents' perspective to assist programs at different stages of CBD implementation.

LP3 – 04, 60040

A cross-sectional analysis of application requirements for residency programs in Canada under pass/fail grading

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Background/Purpose: Canadian medical school graduates are matched with residency programs through the Canadian Residency Matching System (CaRMS). Students apply to programs of interest through an online system at carms.ca, and upload required materials. These materials typically include a Medical School Performance Record (MSPR), Curriculum Vitae, letters of recommendation, and medical school transcripts. In recent years, some Canadian medical students have reported that Canadian residency programs have begun requiring undergraduate transcripts from residency applicants. To the best of our knowledge, the prevalence of this practice among all residency programs in Canada has not been investigated. This requirement may be in response to a shift in Canadian medical education toward pass/fail grading systems and away from letter grades, making differentiation between applicants on the basis of academic performance more difficult. Most applicants do not take the Medical Council of Canada Qualifying Examination Part I until after matching.

Methods: We built a database of residency program application requirements using data retrieved from the CaRMS website (Data was retrieved between May 1st and July 15, 2017). Requirements for residency programs with multiple sites were recorded separately. Residency programs were organized by specialty. We recorded the specific requirements of each residency program using Microsoft Excel. We then analyzed the proportion of residency programs that request transcripts in each specialty. We also considered the differences in program size by using total quota of positions available to compare institutions and specialties with differently-sized residency programs by weighting transcript requirements by the number of positions available in each residency program and institution. From this we calculated both the proportion of residency programs and the proportion of residency positions that require submission of an undergraduate transcript in order to apply.

Results: There was wide variability in requirements across Canadian residency programs. 13 of 15 ophthalmology programs required results of a comprehensive eye exam conducted by an ophthalmologist. Among otolaryngology programs, 2 required or strongly recommended inclusion of an ophthalmological report with the application. After weighting by the number of available positions in each residency program, we found that 31% of Canadian residency positions required submission of an undergraduate transcript in order to apply. Of the 514 CaRMS-rankable residency programs we identified in Canada in 2017, 28% of programs required undergraduate transcripts from applicants. This requirement varied widely by specialty and institution. A majority of positions in public health, radiology, nuclear medicine and dermatology required the undergraduate transcript, while it was not required anywhere for applications in neurosurgery, pathology, and medical microbiology. 9% of programs did not require a medical school transcript. 1 residency program required applicants' MCAT score.

Conclusions: Requirements to include an undergraduate transcript may be an unintended consequence of the widespread shift in Canadian medical education away from numerical and letter grades, in favour of a pass/fail system. This may also be related to 9% of residency programs not requiring medical school transcripts. The requirement for submission of a comprehensive eye exam in order to apply to residency programs in ophthalmology and otolaryngology may not be known to many medical students considering career options in the earlier years of their undergraduate medical education.

LP3 – 05, 60310

Understanding the perspectives of Indigenous medical students as they approach opportunities for postgraduate medical training

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Background/Purpose: Indigenous Peoples are underrepresented in Euro-Canadian medicine. In an effort to address the need for substantive equality in postgraduate training, the University of Alberta Ob/Gyn residency program has developed an Indigenous Admissions Pathway (IAP). The objective of this study is to understand the postgraduate training goals of Indigenous medical students.

Methods: Self-identified Indigenous students currently enrolled in a Canadian medical school were invited to participate in an electronic survey. Analysis included descriptive statistics and a thematic analysis of open-ended questions.

Results: Thirty-six participants responded to the survey. Family medicine (66.7%), internal medicine (44.4%), and Ob/Gyn (38.9%) are the most common intended specialties. Factors that would influence trainee choice of specialty include personal interest, work-life balance, and community need. Trainees identified mentorship from Indigenous physicians, community engagement, and Indigenous Health electives as important complements to an IAP. Participants were asked to describe factors which would influence their choice to apply through an IAP and eight themes were identified. All participants thought that an IAP would have a positive impact on health care for Indigenous patients.

Conclusions: This study supports the ongoing use of the Ob/Gyn IAP. It highlights the goals and priorities of Indigenous students and provides direction for medical educators. An IAP must be accompanied by a robust program of Indigenous professional development and other effective, community driven initiatives to decolonize postgraduate medical education. This study will be used to improve the IAP with the ultimate goal of increasing Indigenous representation in Ob/Gyn and improving access to culturally safe care for Indigenous women.

LP3 – 06, 60740

Predictors of Matching Success for International Medical Graduates in Canada and the USA: a Scoping Review

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Background/Purpose: A large number of International Medical Graduates (IMGs) apply to Canadian and American residency programs each year. However, there is minimal information on objective criteria to guide IMGs postgraduate application process. This scoping review aims to guide future IMGs in residency applications, assist postgraduate programs in the selection of IMG candidates and identify areas for future research.

Methods: We conducted a scoping review of the literature on IMG residency matching process in North America based on the framework of Arksey and O'Malley. Three electronic databases and grey literature were searched using key terms yielding 799 articles. Following titles, abstract and full-text screening 40 articles were chosen for inclusion. Articles were analyzed to develop a meaningful understanding of the criteria used for the IMG selection process.

Results: There is heterogeneity of study designs and selection programs. All the articles included identified standardized test scores (United States Medical Licensing Examination and Medical Council of Canada Exams) as contributory factors to acceptance. Other important factors included letters of recommendation from known physicians, discussed in 60% of the papers, and clinical or research experience in the country of application, discussed in 53% of papers. However, findings also indicate that despite achieving the above criteria IMG status is strong dissuading factor in the matching process.

Conclusions: This review has identified several contributing factors to the IMGs matching process. However, there is limited literature from a Canadian context. Further research is necessary to guide future IMG applicants and postgraduate residency programs.

LP3 – 07, 60764

Training in Soft-Tissue Resection Using Real-Time Visual Computer Navigation Feedback from Surgery Tutor: A Randomized Controlled Trial

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Background/Purpose: In competency-based medical education (CBME), surgery trainees are often required to

learn procedural skills in a simulated setting before proceeding to the clinical environment. The Surgery Tutor computer navigation platform allows for real-time proctorless assessment of open soft-tissue resection skills; however, the use of this platform as an aid in acquisition of procedural skills is yet to be explored.

Methods: In this prospective randomized controlled trial, 20 final year medical students were randomized to receive either real-time computer navigation feedback (Intervention, n=10) or conventional simulation training (Control, n=10) during simulated non-palpable soft-tissue tumor resections. Real-time computer navigation allowed participants to see the position of their scalpel relative to the tumor. Each participant performed 7 resections. The Surgery Tutor platform collected assessment metrics for each resection.

Results: Training with real-time computer navigation feedback resulted in a 0% positive margin rate as compared to 30% with conventional simulation training (p = 0.06). Participants in the Intervention group also performed resections with less excised tissue [12.1(10.5-15.4) vs. 20.3(15.6-22.9) g; p = 0.005], shorter distance moved by the scalpel [8.95(7.84-11.0) vs. 11.6(10.3-12.4) m; p=0.02] and fewer scalpel motions [163(139-212) vs. 226(213-254); p=0.01] as compared to the Control group. After removal of computer navigation feedback, the Intervention group maintained a 0% positive margin rate indicating retention of learned skills.

Conclusions: Real-time visual computer navigation feedback from Surgery Tutor resulted in superior acquisition and retention of procedural skills as compared to conventional simulation training.

LP3 – 08, 60812

Development of a Paediatric Residency Professionalism Curriculum

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Background/Purpose: Perceived lapses in professional behaviours are becoming increasingly common in residency programs. Research supports that skills in professionalism can be taught through role-modelling and structured curricula. To enhance professionalism in the Paediatric Residency Program at the University of Toronto, a novel curriculum was developed. The curriculum aims to cover content that is immediately relevant to residents, to facilitate recognition that expectations and practice culture may differ, and to incorporate evidence supporting professionalism training through reflection, mentorship, and small-group learning.

Summary of innovation: The curriculum is comprised of five case-based sessions/year. Each session focuses on a different professionalism issue (requesting time off, use of technology and social media, interprofessional interactions, patient care, and boundaries). These themes were generated from real-life examples of perceived professionalism issues that were anonymously submitted by residents and faculty and then framed by the professionalism objectives outlined by the American Board of Pediatrics. The curriculum aims to bring residents, fellows, and faculty together to discuss perceived lapses in professionalism in order to generate open discussion, a shared understanding, and approaches for promoting professional behaviours moving forward.

Conclusions: Professionalism is an essential component of medicine and has been identified as a core competency in medical education that improves patient outcomes. Our novel curriculum aims to enhance professionalism training by bringing staff and trainees together to facilitate interactive, case-based professionalism discussions. The curriculum is generalizable across a variety of subspecialty programs and can be easily implemented. Participants endorsed open discussion involving staff and residents, cases that accurately reflected real life situations, and effective take-home points.

LP3 – 09, 59474

Improving Residency Admissions using a Digital Tool

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Background/Purpose: Residency admissions and selection processes are a major responsibility of post-graduate medical education programs. Coordinating and evaluating hundreds of applicants can demand tremendous financial and human resources on an annual basis and significant amounts of time. Selection committees must also simultaneously ensure that the entire operation remains fair and reliable. A robust, online admissions tool to coordinate the large scope and volume of applications can help to address such challenges.

Summary of innovation: The Department of Family and Community Medicine at the University of Toronto has

undertaken a process to revolutionize our admissions process by improving time efficiency for faculty, residents and applicants, and increasing the reliability of our file review and interview scores. These improvements have been facilitated by the development of a dynamic, web-based software platform designed to coordinate the application, scheduling, scoring and ranking processes involved in residency admissions processes, effectively minimizing human error and improving efficiency of time and available resources. Key features of our program are as follows: 1) Automate the Recruitment and Assignment of Reviewers and Interviewers; 2) Display Data to Staff in Real-Time; 3) Facilitate Candidate Evaluation with One Centralized Interface; 4) Guide Reviewers' Scoring with Anchors and Interactive Cues; 5) Prevent Missed, Delayed and Inaccurate Data; 6) Allow Score Revisions; 7) Flag Extreme Score Discrepancies and Identify Hawks and Doves.

Conclusions: Although every residency program has its own unique challenges, the lessons learned in the development of our software platform are generalizable to programs across Canada given the overall similarities in residency application and selection processes.

Undergraduate

LP4 – 01, 60510

Explaining Mental Illness Stigma in Canadian Medical Students: A Nationwide Study

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Background/Purpose: Mental illness is ubiquitous and accounts for a substantial portion of the global disease burden. Unfortunately, negative stereotypes (stigma) about people with mental illness are common among health care professionals and students, which can decrease the quality of patient care. While some fixed factors such as gender and age have been examined, it is not yet clear which specific beliefs and experiences establish stigma prior to training. This study aimed to describe and explain mental illness stigma in the first nationwide sample of incoming Canadian medical students.

Methods: Over the course of 2 months, 262 survey responses were collected from first-year medical students across the 14 English-language Canadian medical schools. Total scores from the validated Mental Illness: Clinicians' Attitudes (MICA-2) scale were used to measure stigma.

Results: Greater mental illness stigma was predicted by male gender, less mental illness exposure, less subjective knowledge about mental health, greater distrust/skepticism toward people with mental illness, and stronger belief that people with mental illness cannot meaningfully contribute to society. Exposure (p = 1.86E-3), knowledge (p = 4.98E-3), distrust/skepticism (p = 9.34E-9), and perceived inability to contribute (p = 8.93E-6), cumulatively explained 31.7% of the variability in MICA-2 stigma score. Neither future specialty of interest (family medicine, surgery, or other) nor believed etiology of mental illness predicted participants' stigma scores.

Conclusions: This study characterized mental illness stigma in the first nationwide sample of incoming Canadian medical students and identified modifiable predictors of this stigma. These offer clear targets for future antistigma educational interventions.

LP4 – 02, 60837

Differences in debt load of Canadian medical students by race, ethnicity, and rurality

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Background/Purpose: The cost of medical education has risen significantly in Canada. The aim of our study is to explore the differences in socioeconomic status, indebtedness, and financial behaviours and stress between various ethnic groups, and by rurality.

Methods: We conducted a cross-sectional survey among medical students at fourteen English-speaking medical schools across Canada. We used descriptive statistics and chi-square tests to identify covariates significantly associated with our primary outcome measure: anticipated total debt above $100,000 upon graduation. Multivariate logistic regression models were fit to determine whether race and ethnicity and rural status were significant predictors of medical student debt. Due to insufficient sample size, regression analyses did not include Black and Indigenous students.

Results: In total, 830 (62.8%) of students reported an anticipated debt of over $100,000. By race and ethnicity, 641 (67.1%) were White; 11 (50%) were Black; 88 (57.9%) Chinese; 27 (56.3%) Indigenous; and 68 (56.7%) were South Asian. By rural status, the proportions were Urban (547; 64.9%) and Rural (283; 59.1%). Compared to White students, Chinese (OR: 0.44, 95% CI: 0.30, 0.65) and South Asian ethnicities (OR: 0.48, 95% CI: 0.30, 0.68) were

associated with lower odds of anticipated debt exceeding $100,000. There was no statistically significant difference in debt levels between urban and rural status.

Conclusions: Chinese and South Asian medical students were significantly less likely to report anticipated debt compared to White students.

LP4 – 03, 60866

Experiences of Physicians in Rural Practice: A Human Library Approach

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Background/Purpose: Medical institutions across Canada have implemented various strategies to address the critical shortage of rural physicians. It is important to encourage urban-origin medical students to consider rural practice. However, many urban-origin medical students have little knowledge of rural life, often relying on generalizations and stereotypes. Such inaccurate or negative beliefs may dissuade them from considering rural practice. We are evaluating a novel medical education approach - the Human Library - to increase medical students' knowledge of rural medicine and rural life.

Methods: The Human Library mimics the format of a regular library with readers borrowing books, except that the books are human volunteers who share personal experiences. To test the concept in medical education, we hosted two online Human Library events in October 2020. We recruited 9 Books - physicians in rural practice - to discuss a particular aspect of their lives. Interested Readers (medical students, faculty, etc.) were able to ask questions about each Book's experiences. Post-session surveys were used to determine the appeal and effectiveness of the Human Library approach, and to highlight areas for improvement.

Results: Our preliminary analysis found that attendees at the online events were highly satisfied, and indicated that they received valuable information from the Books. This suggests the validity of using the Human Library concept for medical education purposes.

Conclusions: An in-person Human library event is planned for Spring 2021 for undergraduate medical students. Residents have also expressed interest for a similar session. Successful Human Library events challenge the perceptions and attitudes of medical learners, perhaps opening their eyes to new possibilities in rural practice.

LP4 – 04, 59688

Parental Leave Policies in Canadian Undergraduate Medical Education: A Policy Review

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Background/Purpose: Canadian medical schools have increasingly diversified their admissions processes to allow for a demographic mix. Successful progression of all students requires supports such as parental leave policies. This work reviews the current parental leave policies in Canadian Undergraduate Medical Education (UGME), determines existing gaps, and provides recommendations for pan-national consistency and support.

Methods: We obtained any applicable policies and any other relevant information regarding parental leave from 12 Canadian UGME programs. Two coders then individually reviewed all information, extracted core themes, and identified positive and negative aspects. Findings were compared across medical schools. Results were reviewed by a senior faculty member.

Results: Key themes included issues pertaining to confidentiality, inclusive diction, duration, and accommodations. Two institutions acknowledged non-traditional parental dynamics. The duration of short-term leave before necessitating a full year Leave of Absence (LOA) was variable with a median of 5 weeks (range 1-8 weeks). Three institutions have policy on accommodations (eg. lactation rooms); however, this was not consistent across the country.

Conclusions: To support the increasingly diverse UGME classes, it is recommended that Canadian medical schools include policy that provides clarity and maintains inclusivity with support to the student as the ultimate priority. There are discrepancies across programs which indicate a need to develop comparable policies. Academic plans detailing planning and returning from the parental LOA, including accommodations (on-call shifts, ER shifts, lactation rooms), would be beneficial to students if represented in policy.

LP4 – 05, 59886

Investigating Medical Student Technology Readiness and the Role of Technology on Career Planning

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Background/Purpose: Technology Readiness (TR) is a metric which quantifies an individual's inclination to use and interact with new technology. Although technology

use in healthcare and medical education is rapidly increasing, the TR of medical students has yet to be thoroughly examined. Furthermore, the role of technology use on career planning and specialty interest exists as an area in medical education which has yet to be explored. This study examines TR of 2nd year medical students before entry to clerkship, and investigates technology use as a career factor.

Methods: A survey assessing 2nd year medical student TR, specialty interest, and the influence of technology use on career planning using a Likert scale was distributed at a Canadian Medical School (Dalhousie University). Demographic factors, TR scores, and specialty interest were analyzed using Chi-square analysis and descriptive statistics.

Results: Students identifying as male were more likely to be influenced by technology use when making career decisions when compared to female students (3.62/5.00 vs 2.84/5.00, p < 0.05). Students identifying as male were also more likely to be technology ready compared to female (95.2% vs 68.8%, p < 0.05). As a cohort, 79% of students were technology ready. When analyzing specialty interest, interest in Urology was associated with students with positive TR scores (94.4%, p < 0.05).

Conclusions: With knowledge of technology use as a career factor, medical student career counseling approaches can be better designed to align with student interests. Furthermore, educational initiatives focused on technology use may be implemented for identified student groups to improve comfort and best prepare students for clerkship and future practice.

LP4 – 06, 60534

Ready or not? Investigating student perspectives on the transition to clerkship at the University of Ottawa Faculty of Medicine

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Background/Purpose: The transition from pre-clerkship to clinical clerkship is a pivotal moment for many medical students. At the University of Ottawa Faculty of Medicine, Unit IV (final unit of pre-clerkship) and the Link Block (preliminary unit of clerkship) are designed to facilitate this change. Improvements to the current medical curriculum may help to better prepare students for clerkship. This includes prioritizing active learning over passive learning, focusing on cognitive integration in pre-clerkship, building on subject complexity via a life-cycle

approach, and associating weekly clinical skills sessions with case-based learning. This study aimed to (1) identify and synthesize literary evidence on the transition from pre-clerkship to clerkship in a four-year medical program, and (2) design a survey to obtain student feedback on clerkship preparedness at the University of Ottawa Faculty of Medicine.

Methods: Two literature searches were conducted in PubMed. Articles were restricted to those published in the last decade; containing an abstract and full text; involving human subjects; and written in the English language. 14 records were included in the combined literature review. An anonymous survey, consisting of multiple-choice questions; Likert-type scale (1 = "strongly disagree" or "not at all confident" to 5 = "strongly agree" or "extremely confident"); and free text questions, was created using Survey Monkey.

Results: Studies were classified into three categories: needs-assessment only, needs-assessment with next steps, and quality improvement. Students with clinical skills training reported an easier transition to clerkship. A survey assessing students' comfort with the existing curriculum and recommendations for curricular reform was designed for dissemination to second-, third-, and fourth-year medical students, as well as MD/PhD students, in both the Anglophone and Francophone streams at the University of Ottawa.

Conclusions: Based on our literature review, the transition to clerkship was described as difficult and one requiring quality improvement. Student responses to the survey will help guide curricular reform to improve clerkship preparedness at the University of Ottawa Faculty of Medicine.

LP4 – 07, 60699

Perceived academic workload and its relationship between the real and declared academic workload

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Background/Purpose: Academic Workload (AW) is a central phenomenon in management processes of higher education institutions. Several studies show discrepancies between declared workload in course programmes and the workload students experience, also called real workload. Nevertheless, literature emphasizes students' perceptions of AW as a better measure of workload. Disclosing eventual discrepancies between these three

types may help detect curricula problems threatening the quality of processes. This study sought to characterize the relationship between perceived and declared AW and between perceived and real AW of undergraduate students of University of Chile's Faculty of Medicine.

Methods: We applied a survey to 500 students and used institutional data to compare these results with the workload declared in their course programmes. To test this, descriptive statistical analysis were performed.

Results: Perceived AW shows a mean that sets the perception between adequate and high. A positive relationship was found between all three types of academic workloads. Perceived AW correlates with real AW (0.596) higher than with declared AW (0.380). Looking closely at real academic workload, non-contact hours revealed a more significant correlation with perceived AW than contact hours (0.557 and 0.475 respectively).

Conclusions: Although literature generally indicates that perceptions of workload are weakly related to real hours of work, our findings say otherwise. Furthermore, the fact that non-contact study hours are the ones that correlate the most with perceived AW, suggests the relationship between real AW and perceived AW is worthy of deeper examination. Future research should explore real AW considering which factors are negatively affecting the autonomous work.

LP4 – 08, 60607

Descriptive analysis of the medical student population at the University of Ottawa

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Background/Purpose: A diverse medical school population enhances student preparedness and motivation to care for underserved communities. We recognized a lack of information regarding class profiles of the University of Ottawa medical students compared to statistics released by other Canadian medical schools. Our purpose was to collect and report this data to increase transparency of diversity amongst medical students.

Methods: An online questionnaire was developed to encompass the demographic, educational and socio-economic background of uOttawa cohorts MD2020-MD2023, with the link distributed from February to May 2020.

Results: The response rate was 63%, and 65% were female. The most represented age group was 21-23 (71%). A majority completed a 4-year degree (59%) and 80% had a GPA of 3.9-4.0. There was an under-representation of Black and Aboriginal students (2.7%, 0.5%), and an over-representation of Asian/Pacific Islanders (22%), as compared to data from the latest Canadian census. Only 8% of students overcame financial barriers, with 55% having a household income of over $100,000. 24% overcame social barriers and 8% educational barriers. Respondents were diverse in spoken language (23%), immigrant status (20%) and visible minority status (36%). A majority of students (63%) wished to know more about uOttawa's medical candidates at the time of their application.

Conclusions: While the medical student population at the University of Ottawa is indeed diverse, noticeable differences remain when compared to the Canadian population. Increasing the transparency of medical student diversity is desirable by the majority of respondents and could promote the University's social accountability.

LP4 – 09, 60882

The diversity of medical school applicants and students at the University of Ottawa: a retrospective cohort study

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Background/Purpose: It is critical to have medical students who are reflective of the Canadian population. Medical students from underrepresented groups are more likely to become physicians for minority populations and patients experience better quality of care when their physicians have similar backgrounds to their own. Despite these benefits, Canadian medical student and applicant demographics are not well defined. The purpose of this study was to explore medical student and applicant diversity at the University of Ottawa from 2013-2019. Demographics explored included: age, race, ethnicity, socioeconomic status, sexual orientation, gender identity, disability and rurality.

Methods: Voluntary diversity surveys were provided to medical students and applicants. Survey data was analyzed using descriptive statistics.

Results: From 2013-2019, 465 medical students and 5007 applicants completed the survey. Majority of medical students and applicants were 21-25 years old (87% and

77%) and few identified as LGBTQ+ (7% and 13%) and had a disability (6% and 5%). Compared to 2016 Canadian Census data, medical students and applicants were less likely to be Indigenous, Black and Filipino and have a disability (p<0.05). Medical students (62%) were more likely to have a parental income of >$100000/year compared to Canadian households (32%). Medical students and applicants did not differ on Indigenous (3% and 1%), Black (2% and 4%) and Filipino (0.4% and 0.9%) identity and disability (p>0.05). Compared to applicants, medical students were more likely to live in a rural area (14% and 8%) (p<0.05).

Conclusions: Although applicants and medical students were similar, both differed from the Canadian population. Considering the results, more initiatives should be implemented to encourage a more representative applicant pool and student body.

Impacts of COVID-19

LP5 – 01, 60918

Impacts of COVID-19 on Curricular Changes on Medical Student Wellness

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Background/Purpose: COVID-19 altered medical student education, including a shift to remote learning for pre-clerks and removal from hospital duties for clerks. Pre-clerkship curriculum remains largely online and changes often, contributing to ongoing student stress. Our study assessed the effect of curricular changes made in response to COVID-19 on medical student mental health and wellness.

Methods: This was a prospective study of students in Queen's School of Medicine in the cohorts graduating 2021-2023. We created an online questionnaire using Qualtrics that included the Perceived Stress Questionnaire as well as questions assessing stressors that accompanied remote learning. Data was analyzed using mixed-methods on NVivo and SPSS.

Results: We received 93 responses. There were 20, 34 and 39 respondents from the 2021, 2022 and 2023 cohorts respectively. Thematic analysis revealed that (1) the top stressor amongst students was uncertainty about curriculum, career and CaRMS; (2) isolation was the aspect of remote learning students disliked the most; and (3) students' greatest worry about COVID-19's effect on their future surrounded residency, electives and CaRMS.

In response to "I am worried that I will be less competitive as a CaRMS applicant due to curricular change", the mean response was 5.19 out of 7 on level of agreement and the mode was 7/7. Comparing cohorts revealed 2022s and 2023s have significantly more worry about curricular changes compared to 2021s.

Conclusions: Medical students experienced stress due to COVID-19 curricular changes. Fears about inadequacy in education and readiness for residency emerged as major themes. These results will be the focus of our interventions with Undergraduate Medical Education going forward. We hope to deliver this questionnaire to students across Canada to expand its impact.

LP5 – 02, 60618

The Impact of COVID-19 on Resident Medical Education in Canada: A Systematic Review

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Background/Purpose: The novel coronavirus pandemic (COVID-19) has had an unprecedented impact on the Canadian medical education system, particularly for resident trainees. This systematic review aimed to explore the impact of COVID-19 on resident physician training in Canada.

Methods: The PubMed, MEDLINE, and CENTRAL databases were queried using keywords (COVID-19, SARS-CoV-2, residency, medical education, Canada). Articles from December 2019 to September 2020 were included. Literature screening and data extraction were conducted by two independent reviewers. A descriptive summary of the themes, goals, challenges, and response strategies to the COVID-19 pandemic was generated.

Results: After screening 141 articles, 8 articles met inclusion criteria. Thematic analysis demonstrated three main goals: 1) maintenance of training; 2) promotion of wellness; and 3) reducing trainee exposure. The most common challenges were: 1) reduction of exposure during clinical encounters; 2) avoiding unnecessary exposures; and 3) redeployment to auxilary rotations. The most common response strategies were: 1) transitioning to virtual teaching; 2) reducing cross-site coverage with back-up call systems; and 3) improving communication between leadership and residents. Additionally, innovative solutions developed in response to the pandemic improved gaps in healthcare pre-pandemic.

Conclusions: The COVID-19 pandemic has significantly impacted the medical training of physicians in Canada. The main goals, challenges, and successful response strategies implemented by various residency programs across Canada were identified. As the COVID-19 pandemic continues to evolve, residency programs will need to continue to adapt, innovate, and implement strategies to continue to provide exceptional medical training.

LP5 – 03, 60745

Initial Impact of COVID-19 on Postgraduate Pediatric Trainees: What We Know So Far.

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Background/Purpose: The COVID-19 pandemic has impacted medical education, including increased reliance on virtual consults and the requirements to wear Personal Protective Equipment (PPE) for in-person settings. We sought to understand how the changes brought on by COVID-19 affected the learning environment of postgraduate trainees.

Methods: A web-based questionnaire consisting of 15 questions was sent to postgraduate trainees within the Department of Paediatrics at McMaster University over 6 blocks of clinical rotations. The survey was designed as a quality improvement initiative.

Results: We collected 77 responses. 71.4% of responses were from core paediatric residents, with the remainder a combination of subspecialty fellows, neurology and physiatry residents. The majority of respondents felt their learning goals were either 'definitely met' (48.1%) or 'somewhat met' (48.1%) despite COVID-19 related changes. Common barriers that affected learning were technical issues (49.4%), scheduling challenges (29.9%) and a lack of teaching (27.3%). Many trainees expressed that low patient volumes and lack of physical exam practice hindered their learning. Some trainees found the use of PPE during in-person consults to hinder verbal communication, and that it was challenging not to physically connect with patients.

Conclusions: Most trainees felt their learning goals were met despite abrupt program changes. A number of challenges were identified, and recognition of these may help curriculum developers to adapt educational programs and mitigate disruptions during subsequent 'waves' of COVID-19. These changes may be especially important to implement as the transition to Competency By Design Programs becomes more prominent.

LP5 – 04, 60298

Level of Knowledge in the COVID-19 Pandemic: A Cross-Sectional Survey of Canadian Medical Students

Kacper Niburski McGill, **Keith Todd** McGill, **Rachel Vaughan** McGill

Background/Purpose: During health crises medical education is often derailed as was the case during the current COVID-19 pandemic. Medical trainees face the daunting task of having to gather, filter and synthesize new information about the evolving situation often without the standardized resources they are used to.

Methods: We surveyed Canadian medical students, in the hardest hit province of Quebec, on how they were acquiring knowledge as well as what they knew of the pandemic. Google Forms was used, with the survey being distributed to each medical school in Quebec (McGill, ULaval, Udem) both through email and through social media pages for each class year. Two analyses, Mann-Whitney and ANOVA tests, were performed for year of study and degree obtained.

Results: We received responses from 111 medical students from three universities, which represents 5% of the students invited to complete the survey. Students reported using mass media most frequently (83%) and also had a high rate of use of social media (to gather information about the pandemic. They rated these resources low in terms of their trustworthiness despite the high rates of use (average 2.91 and 2.03 of 5 respectively). Medical students also endorsed using more formal resources like public health information, scientific journals and faculty-provided information that they trusted more, however, they accessed these resources at lower rates. Of note, medical students had correct answered 60% of COVID-19 prevention strategies, 73% clinical correct answers, 90% epidemiological correct answers. Additionally, students who were training in the larger city of Montreal, where the worst of the outbreak was focused, tended to significantly perform better ($p<0.0001$) than their colleagues who were not located there.

Conclusions: These finding indicate a wide use of information resources intended for public consumption rather than more rigorous and trustworthy sources. Furthermore, there seems to be a knowledge gap amongst medical students responding to this survey that suggests an opportunity to improve the delivery of educational content during this rapidly evolving pandemic.

LP5 – 05, 60775

Introducing a COVID-19 ethics curriculum for medical students, by medical students: harnessing an integrative and collaborative approach

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Background/Purpose: During the COVID-19 pandemic, debates have arisen surrounding the equitable allocation of scarce resources. Regulatory frameworks often reflect different principles and values, creating moral dilemmas for healthcare providers. With this in mind, our goal was to provide a "Return to Clerkship" (RTC) program to third-year medical students on ethical considerations surrounding the COVID-19 pandemic, focusing on issues of resource allocation and equity. We formed a diverse working group consisting of medical students and faculty leads, with curricular content spearheaded by a group of medical students who developed a COVID ethics resource repository.

Summary of innovation: Our instructional approach consisted of an introductory lecture surrounding the ethics of resource allocation during COVID, a small-group case-based discussion to engage students in applied decision-making, and an expert panel to highlight real-life ethical dilemmas in the pandemic. Just-In-Time teaching was implemented by providing students and tutors with materials to ensure preparedness for the sessions.

Conclusions: This curriculum highlighted the role of integrating a multi-modal approach in medical education and the important role of medical students in co-developing curricula. Overall, while students seemed to enjoy the discussion and real-life application of ethics afforded by the case analysis and panel, they had mixed responses to the theoretical content of the introductory lecture. Differing levels of ethical and medical knowledge led to discrepancies in understanding, but preparatory materials and seminars contributed to better learning. This project provides a strong basis for future collaborative endeavours between faculty and students in medical education and reinforces the importance of education on timely ethical issues.

LP5 – 06, 60725

Using Virtual CPD to Build Addictions Capacity in Ontario during COVID-19

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Background/Purpose: The COVID-19 pandemic has left individuals who use substances (IWUS) more vulnerable. Increased susceptibility to infection, alongside limited clinical addictions expertise, has exacerbated challenges with access to appropriate care, and highlighted need for capacity building in addictions care.

Summary of innovation: Project Extension for Community Healthcare Outcomes-Ontario Addiction Medicine and Psychosocial Interventions (ECHO-AMPI) is a virtual continuing professional development (CPD) program supporting healthcare professionals (HCPs) working with IWUS during COVID-19. ECHO-AMPI connects an inter-professional team of subject matter experts with Ontario HCPs weekly to discuss client cases and best practices in supporting IWUS. ECHO-AMPI's impact on building addictions care capacity was evaluated using Moore's evaluation framework for CPD. Satisfaction was assessed after each session using a five-point Likert scale. For learning/competence, participants rated their confidence in competencies pre- and post-participation using a 0-100 confidence scale. Competencies reflected assessment, treatment and management of addictions. Post-ECHO, participants self-reported whether ECHO-AMPI participation changed their practice, and described these changes, both in general and in the context of COVID-19. ECHO-AMPI comprised of 79 HCPs from 62 organizations across Ontario. Average session attendance was 54 participants. Mean satisfaction scores were high (>4.24/5), and there was a 12% improvement in participants' confidence in addictions care (p<.001). 77% of participants reported changing their practice following participation.

Conclusions: Our findings suggest ECHO-AMPI is an effective educational intervention that builds HCP confidence and capacity to support IWUS during COVID-19. High participant engagement and satisfaction scores

demonstrate that addictions care-focused CPD can be successfully delivered virtually during COVID-19.

CME & Faculty Development

LP6 – 01, 60929

Assessing the Environment for the Implementation of a Global Health Continuing Professional Development (CPD) Program in Africa: An Environmental Scan.

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Background/Purpose: In 2019, a radiation oncology team at a Canadian urban medical centre was asked to develop and implement a global health continuing professional development (CPD) program in Africa. To inform program development, a narrative literature review was conducted. The following questions were examined: what is the current environment for global health education (GHE)continuing professional development programs and which programs exist in the radiation oncology specialty, what roles do they fulfill and what are their theoretical and structural underpinnings.

Methods: MedLine, ERIC and the Cochrane Database were searched using the following terms: global health, global health education, African healthcare, continuing professional development, blended learning, guidelines. Relevant articles were reviewed in their entirety.

Results: The literature review yielded the groupings: current environment of global health, global health education and global health education in the field of radiation oncology. Furthermore, this review identified deficiencies in the current literature. These include: no consensus on a definition for global health, the focus of GHE on undergraduate and post graduate medical education, focus on development of GHE competencies, lack of description of the structures and theoretical underpinning of current GHE initiatives, and finally, a lack of grounding of the GHE programs in local environmental factors.

Conclusions: While there has been an increase in the number of publications focusing on GHE and GHE CPD, there remain numerous deficits in the current literature. These gaps provide opportunities and areas of focus for those interested in GHE research and program development

LP6 – 02, 60326

Evaluating the impact of a trauma-informed care workshop for palliative care providers

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Background/Purpose: Traumatic experiences have physical and psycho-spiritual implications for patients with palliative care needs. It can affect their ability to trust others, exacerbate symptoms, and lead to avoidance of conversations related to end-of-life. Previous research in other disciplines suggests the benefit of education for clinicians on trauma-informed care (TIC). TIC recognizes the impact of trauma and its' impact on health, and responds by adapting practices to facilitate healing and prevent retraumatization. This study evaluated the impact of an interprofessional workshop on trauma-informed approaches to palliative care on participants' self-rated measures of working with patients who have a history of trauma.

Methods: Participants completed a pre-workshop needs assessment, a pre-post workshop survey of self-rated measures of impact, and a 2-month post-workshop survey to evaluate longer-term impact. Responses were analyzed using statistical and thematic analysis.

Results: In total, 37 palliative care clinicians (a combination of nurses, physicians, residents, and grief counsellors) attended the session. Triangulation of survey responses and qualitative data showed an increase in participants' self-reported awareness and understanding about the importance of TIC, their knowledge and confidence in applying a TIC approach, and attitudes towards incorporating TIC in their practice.

Conclusions: This study demonstrated that a TIC workshop had a favourable impact on participants' self-reported measures of applying a TIC approach in their clinical palliative care practice. Future research is warranted to examine the impact of the workshop on patient outcomes.

LP6 – 03, 60716

Navigating physician education: Curriculum mapping gives new directions to continuing professional development courses

Robert Parson University of Ottawa, **Paul Hendry** University of Ottawa, **Jessie Thuswaldner** University of Ottawa, **Heather Lochnan** University of Ottawa

Background/Purpose: Family physicians must maintain competence over a broad range of topics to ensure quality care for their diverse populations. Continuing professional development (CPD) courses provide one avenue for family physicians to stay up-to-date in their knowledge and skills. Curriculum mapping is a useful way to analyze the course offerings and determine to what extent the objectives align with the vast array of competencies required of family physicians. The map can be used by planning committees as part of their needs assessment process.

Methods: Using Microsoft Excel, we compiled a total of 547 individual presentations from the 36 different CPD courses that took place between 2017-2019. We mapped these courses to a list of competencies for family physicians developed by consensus of stakeholders. We assigned a single point to each time a competency was addressed in a presentation's learning objectives. Analysis of these results was done to inform future planning.

Results: Among the 547 presentations reviewed, competencies met most often were within the broad and overlapping categories of "Care of the Adults" (85.9%) and "Family Medicine Expert" (90.4%). Competencies met the least often were mapped to the categories of "End-of-life-care" (0.9%) and "Maternity and Newborn care"(2.4%). Within the nonmedical expert CanMEDs categories Health Advocate (4.9%) and Professional (5.7%) were lowest.

Conclusions: Curriculum mapping is a useful tool to identify gaps in competencies. This can be used as a guideline when designing learning objectives for future CPD courses. The results can also facilitate reflection on why some competencies are over or under-emphasized.

LP6 – 04, 60611

Development of a mobile application to increase motivation, engagement and teaching activity of clinical faculty using gamification principles.

Aazad Abbas University of Toronto, **Sarah McClennan** University of Toronto

Background/Purpose: A fundamental pillar of an academic healthcare institution is a commitment to excellent medical education. However, compared to research and patient care roles, clinician teachers have historically felt undervalued and under appreciated. Research has shown that clinician teachers are intrinsically motivated for their work, but there is a lack of institutional recognition for their contributions to medical education. In our large community hospital with an academic mandate, we propose to recognize and reward the efforts of clinician teachers using a mobile application based on gamification algorithms.

Summary of innovation: Together with Google's Firebase console API and the cross platform and open-source development framework Ionic, we developed a mobile application named TutorTracker. Teaching data is extracted from the education office spreadsheets and algorithmically synchronized with the secure online database. Currently available on both the iOS and Android application stores, physicians may easily track their clinical teaching using various parameters such as hours of teaching, date, subject and course. The application rewards physicians using virtual badges, for quantity and diversity of teaching and provides a summary of the physician's clinical teaching history. This allows physicians to easily submit yearly hospital and university renewals, as well as document yearly continuing medical education (CME).

Conclusions: Gamification principles have been effectively implemented to construct a mobile application allowing clinician teachers to track and be rewarded for their educational responsibilities. Next steps would be to evaluate the application utilization and satisfaction, assess change in physician teaching and implement higher level gamification algorithms.

LP6 – 05, 60662

Exploring the experiences of healthcare leaders from diverse professional backgrounds

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Background/Purpose: The professional profiles of senior healthcare leaders have grown increasingly diverse in recent years. However, research in other domains has shown that diversifying membership does not necessarily address equity and inclusion. Our intent was to understand the experiences of leadership executives that come from professional backgrounds other than medicine and nursing.

Methods: We conducted a phenomenographically informed qualitative study, interviewing 14 participants. Inclusion criteria included 1) holding a senior leadership position in an Ontario hospital and 2) having a professional background outside of nursing or medicine.

Results: Common identities and journeys to leadership were identified as three overlapping categories: the emancipatory journey of the champion leader, the unexpected journey of the discovered leader, and the practical journey of the utilitarian leader. Participants had diverging perspectives on the importance of clinical knowledge, and felt their individual expertise contributed to their success. Generally, participants with healthcare experience tended to disregard their previous identity, while those possessing business backgrounds embraced theirs.

Conclusions: If health sciences genuinely value professional diversity, opportunities to support experiences of professionals with non-health and allied health backgrounds in hospital settings need attention. Mentorship supports focusing on individuals are required, but this isn't enough. To promote unique and diverse perspectives in healthcare leadership spaces, cultural and structural changes must lead the way. Leadership programs may need to attend not only to developing diverse teams but also to genuinely embracing this diversity in hospital settings.

LP6 – 06, 60922

Barriers and Facilitators to Participating in Research at a Distributed Medical School Campus

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Background/Purpose: Michael G. DeGroote School of Medicine (McMaster) is a Canadian medical school with multiple distributed campuses. These campuses provide a unique learning experience, with core training and research opportunities driven by local faculty. Little is known about differences in research participation at distributed compared to central campuses. Our study explores students' perceptions of research and perceived facilitators and barriers. Our primary objective was to determine if significant differences exist in attitudes between campuses.

Methods: Medical students at McMaster voluntarily participated in this cross-sectional study. A survey of 39 closed-ended questions was distributed via email and social media. Descriptive statistics were used along with

Mean Likert scores, with responses grouped in agreement (Likert 4/5) and disagreement (Likert 1/2). Univariate analysis with Mann-Whitney test determined statistical differences.

Results: Attitudes towards research were similar between campuses. Research was motivated by goals of obtaining residency (63%). Barriers included lack of time (31.5%), and difficulty in finding a project (44.5%). Many felt training in research methodology and scientific literacy was inadequate (93.1% and 89% respectively). More main campus students thought research was important for their future career goals (75% vs 65.5%), and that it should be an important criteria in attaining residency (17.1% vs 8.6%); however, neither of these were statistically significant.

Conclusions: This study is one of the first to find that there are similarities in research participation and attitudes between main and distributed campus medical students in Canada. As enrollment increases, medical schools are likely to increase distributed sites and our findings may help with future planning.

Teaching & Learning with Technology

LP7 – 01, 60306

Assessing clinical reasoning via virtual technology

Veronique Phan Université de Montréal, **René Wittmer** Université de Montréal

Background/Purpose: The UGME of Université de Montréal has been offering to students suspected to have clinical reasoning difficulties a session at the simulation center. During the session, a student is observed by two experienced clinicians during a history and physical examination (PE) of two scripted clinical scenarios using standardized patients. Clinical reasoning is assessed at three different moments (after the history taking, the PE and the final communication with the patient). At the end of the session, feedback is communicated to the student. Due to social distancing during COVID-19, all simulation activities at the sim center were suspended.

Summary of innovation: Supervisors from the program conducted an adapted simulated session using Zoom ® with a referred student. Clinical reasoning was evaluated using the same clinical scenarios which did not need to be adapted. PE had to be modified since it could not be observed. Instead, the student had to explain the rationale for selecting examination techniques relevant to the case. No standardized patient was used. Each supervisor played in turns the role of the patient while the

other observed the simulated clinical encounter. Results: Assessment of clinical reasoning, as well as communication were successfully assessed via virtual technology. PE assessment was adapted but clinical reasoning associated with the selection of appropriate exams relevant to the case could be assessed.

Conclusions: Assessment of clinical reasoning of medical students using virtual technology is a feasible alternative when availability of the simulation center is limited or when social distancing is required.

LP7 – 02, 59670

The Use of "Patchwork Text" Written Assignments Encourage Reflective Practice in a Simulation-based Resuscitation Curriculum

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Background/Purpose: Learners are actively engaged if they are involved in their assessment process. Simulated learning provides a safe environment to encourage reflective practice. The Patchwork Text (PT) assignment format encourages self-assessment and demonstration of reflective practice. The aim of this study was to assess the quality of self assessment after the implementation of assigned written reflections.

Methods: 50 junior residents participated in the Nightmares Course-a longitudinal multidisciplinary simulation-based curriculum for training in resuscitation. Participants completed a pre-course questionnaire to identify their learning goals. 25 residents were allocated to the Patchwork Text group and 25 were allocated to the control group. Following each simulation session, the PT group were assigned written reflections based on their identified learning goals. After completing the course, participants completed a survey to provide their self-assessment. A thematic analysis was conducted to identify differences in the number and quality of themes that emerged. The PT group also completed a survey regarding the impact of the assignments.

Results: In the PT group, the major themes that emerged regarding leadership skills included "Communication Skills", "Approachability" and "Decisiveness". For teamwork skills, the major themes included "Adaptability," "Engaging in Role," and "Communication Skills." In the control group, the major theme that emerged for both leadership and teamwork skills was "Communication Skills". 21 (84%) of PT participants indicated that the assignments helped achieve their personal learning goals and 16 (64%) found that it

augmented their feedback during their post-simulation debrief. The benefits that the PT group identified included encouraging reflective practice and clear identification of and focus on learning goals. 18 (72%) of the PT group recommended including written reflection for the future Nightmares Course.

Conclusions: The Patchwork Text assignment format can be used to encourage reflective practice and higher quality of self-assessment regarding the development of teamwork and communication skills in simulation-based learning of resuscitation.

LP7 – 03, 60793

"The Airwayve Podcast": a novel, accessible, student-led anesthesia podcast for medical students

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Background/Purpose: Medical students remain underexposed to anesthesiology before clerkship. There is a paucity of accessible educational materials in anesthesia geared towards medical students and the COVID-19 pandemic has compounded this issue further by restricting clinical access to anesthesia. Together, these factors pose a barrier to foundational learning and career exploration.

Summary of innovation: As the first of its kind, "The Airwayve Podcast" teaches fundamental anesthetic concepts using succinct, student-generated episodes that are reviewed by senior medical students, residents and staff physicians. Episodes are recorded to a hosting platform and distributed internationally via podcast apps. Episodes explore topics using a stepwise approach to content that may be unfamiliar to medical students (e.g. general anesthesia). Recognizing that students typically encounter anesthesia later in their training, episodes also include tips for learners and feature guest speakers to provide insights into the scope of practice and career exploration. For episodes and summaries, visit www.airwayvepodcast.com

Conclusions: Four medical students, three residents and one faculty member have collaborated on the podcast. Each episode undergoes a three-step editorial process and contributes to a repository of content at the medical student level. With the first series, entitled "Introduction to Anesthesia", now complete, there have been 320 downloads across five continents since September 2020.

The podcast is endorsed by the McMaster University Department of Anesthesia and has been shared nationally with program directors and medical school interest groups with commitments for distribution. The podcast is listed in the McMaster Anesthesia Clerkship curriculum page and has been well received by faculty and students.

LP7 – 04, 60033

Building International Bridges and Alliances Through Virtual Platforms: An Online Pediatric Lecture Series

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Background/Purpose: Electronic learning (e-learning) has become an important resource to facilitate learning during the COVID-19 pandemic. Globally, e-learning provides a unique avenue to support medical education beyond geographical boundaries and allows students from different institutions to learn collaboratively.

Summary of innovation: An online 'Pediatric Lectures Series' was developed for medical students locally and at the University of Namibia (UNAM) to supplement their learning during interruption to their clinical duties. Live, hour-long online lectures were offered twice-per-week for a one-month pilot. All recorded lectures were made available to students for review at their convenience. After the pilot, 83 students completed a survey to gauge reactions and engagement. Post series quizzes were sent out 2, 4 and 6 months after the pilot to assess knowledge retention.

Conclusions: Student feedback highlighted the use of Zoom polling, Kahoot quizzes, and assignment of two lecturers per session as important to their learning. The additional lecturer allowed for synchronous clarification without disruption to the presenter. 86.8% agreed or strongly agreed that their knowledge base changed after the series and 79.5% reported comfort with approaching a pediatric patient after the series. 71% expressed interest in continuing the series after returning to clinical duties. The most reported barrier to attendance was internet connection (44%) but 72% of learners still preferred being able to attend the live lectures. This project shows promise that e-learning can support medical education in low resource settings both during and after COVID-19. It also offers an avenue for students to learn collaboratively and gain appreciation for variation in practice and resources globally.

LP7 – 05, 60620

OB-G in YEG: Availability and creation of a medical education podcast in obstetrics and gynecology

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Background/Purpose: Podcasts have emerged as a popular means of knowledge acquisition and have been demonstrated to be an effective medical education tool. The uptake of podcasts is high in many areas of medicine, however there is limited information about podcast use in obstetrics and gynecology. The purpose of this project was to determine the availability of medical education podcasts in OBGYN, and to create a podcast specifically designed for Canadian learners.

Summary of innovation: A comprehensive search of commonly used podcasting platforms was performed to identify podcasts for learners in OBGYN. We identified eight podcasts; two were currently active and none were specific for Canadian learners. In response to the lack of content for Canadian OBGYN learners, a medical education podcast "OB-G in YEG" was created and released in January 2020. The podcast is freely accessible on podcast hosting sites or through the show's webpage and references guidelines from the Society of Obstetricians and Gynaecologists of Canada. Individual podcast episodes were created by identifying relevant topics, developing a podcast script, recording episodes, and uploading to the platform.

Conclusions: The project currently has ten episodes and 1427 unique downloads as of October 2020. Current topics include relevant clinical presentations that learners encounter including pelvic pain, ectopic pregnancy, and vaginal discharge. The project is currently monitoring usage, assessing barriers to use and evaluating the effectiveness podcasts in medical education. In the era of remote learning, technology will become more important than ever in medical education, and it is important that women's health topics are appropriately represented.

LP7 – 06, 60834

How a Web app helps medical students practise for the OSCEs

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Background/Purpose: Medical students, while preparing for the OSCEs, feel the need to practise their medical interview in real time with their peers. However, for an individual, creating such clinical scenarios requires a significant amount of time and effort and can increase the exam-related stress. Therein, the Groupe de perfectionnement des habiletés cliniques (GPHC) at Université Laval (UL) felt a need for an alternative study tool that would allow students to properly practise for the OSCEs.

Summary of innovation: Our committee launched a Web app in 2015 which provides students with 240 clinical cases for practice. The cases, organized in systems and reasons for consultation, contain all the required sections of a complete medical interview. Three years later, the committee established a partnership with pharmacists to create pharmacology multiple-choice questions which currently add up to 228. Sections on a physical exam and medical notes are the most recent additions to the app.

Conclusions: The app has been immensely popular amongst UL students. In fact, in a recent limited survey, 99.3% of responders stated that they would recommend the app to another medical student in their program. Some faculty members decided last year to use the platform as part of their weekly classes. With members from four medical schools in Quebec, our web app not only promotes innovation and the development of effective educational tools, but also encourages collaboration between students and teachers from the medical community.

LP7 - 07-60838

Approaching the clinical environment through virtual simulations as students in preclinical training

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Background/Purpose: Medical students have limited access to clinical and hospital settings throughout their first years of training, especially during the COVID-19 pandemic. They learn fundamental science and basic medical concepts but have few opportunities to test their knowledge and abilities in an actual clinical context.

Summary of innovation: Accordingly, the Groupe de perfectionnement des habiletés cliniques (GPHC) at Université Laval launched the virtual simulation project. These simulations are computerized modules, where the user plays the role of a physician and must make all the decisions regarding the medical interview, the physical exam, the investigations needed and the patient care in general. While the first simulations were filmed, thus requiring actors and equipment, the next simulations will be animated illustrations. Using customized artworks produced through a partnership with a local artist, the GPHC plans to address racial profiling issues by including cultural diversity within the simulations.

Conclusions: The first two simulations having been very well received by both students and professors at Université Laval, they are now officially approved by the Faculty of Medicine and part of the curriculum. This project helps the GPHC reinforce students' knowledge about the clinical features of diseases, care, and treatment, and thus familiarizing them with their future responsibilities as physicians. Therefore, this project promotes learning innovation in medical education, by heeding students' needs and promoting innovative e-learning in the medical curriculum.

LP7 - 08-60823

Development of an Online Rural Medicine Self-Learning Module (SLM) for Medical Students-

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Background/Purpose: There is a discrepancy between the number of Canadians living in rural communities versus the number of physicians available to meet their health needs. Educational strategies aimed to rectify this imbalance have included mandatory undergraduate medical rural rotations. However, standardized training methods designed to prepare students for different clinical and cultural interactions are limited. In response, we developed and implemented an online pre-departure SLM for first-year medical students.

Summary of innovation: An interdisciplinary team including distributed medical education and social accountability experts collaborated to create a pre-departure training rural SLM for first-year medical students. The SLM's content focuses on cultural safety and educational design includes video interviews, clinical scenarios, quizzes and reflective exercises. 136 students voluntarily completed the pre and post-SLM surveys, which included rating scales and comment boxes. Post-SLM items related to rural medicine interest and self-assessed knowledge, showed an increase in all categories, including interest in pursuing a career in rural medicine for students who had lived in rural areas (M=3.4; M= 3.5) and those who did not (M= 2.8; M= 3.0). Student comments were largely positive, contributing to enhancing the effectiveness of the module for future students.

Conclusions: With the interdisciplinary collaboration of numerous experts, we discovered that a comprehensive virtual pre-departure training SLM can be developed and successfully implemented to promote interest about rural communities and rural medicine. This standardized training can be expanded to other Canadian medical schools to help prepare medical students for rural medicine experiences and ultimately increase interest in rural medicine and related career opportunities.

LP7 - 09-60868

Artificial intelligence in undergraduate medical education: A scoping review

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Background/Purpose: Artificial intelligence (AI) is a rapidly growing phenomenon poised to instigate large-scale changes in medicine. However, medical education has not kept pace with the rapid advancements of AI. Despite several calls to action, the adoption of teaching on AI in undergraduate medical education (UME) has been limited. This scoping review aims to identify key concepts in the peer-reviewed literature on AI training in UME.

Methods: The scoping review was informed by Arksey and O'Malley's methodology. 8 electronic databases including MEDLINE and EMBASE were searched for articles discussing the inclusion of AI in UME between January 2000 and July 2020. 1750 articles were independently screened by three co-investigators and 22 full-text articles were included. Data was extracted using a standardized checklist. Themes were identified using iterative thematic analysis.

Results: The literature addressed: 1) a need for an AI curriculum in UME, 2) recommendations for AI curricular content including machine learning literacy and AI ethics, 3) suggestions for curriculum delivery, 4) an emphasis on cultivating 'uniquely human skills' such as empathy in response to AI-driven changes, and 5) challenges with introducing an AI curriculum in UME. However, there was considerable heterogeneity and poor consensus across studies regarding AI curricular content and delivery.

Conclusions: Despite a large volume of literature, there is little consensus on what and how to teach AI in UME. Further research is needed to address these discrepancies and create a standardized framework of competencies that can facilitate greater adoption and implementation of a standardized AI curriculum in UME.

Curriculum

LP8 - 01-60549

The Development and Evaluation of the Edmonton Frail Scale Training Course

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Background/Purpose: With a growing population of older adults with complex health issues, assessing for and

quantifying frailty are important competencies for health professionals. The Edmonton Frail Scale (EFS) is a multidimensional tool that supports the delivery of frailty-inclusive care across the care continuum. Developing an educational-framework informed EFS training course would complement the pre-existing training video and "Tool Kit" and aid in implementation of frailty inclusive care. Evaluation of these resources would help ensure their effectiveness and determine their suitability in diverse health professions settings.

Summary of innovation: The 12-module training course includes practice activities and a simulation-based final assessment to assess trainees' ability to administer the EFS in a clinical setting. Using the Backward Design framework, we mapped out course content and assessment. We then turned to Kane's framework to collect validity evidence for our simulation-based assessment. In parallel with the training video and Tool Kit, the training course was evaluated quantitatively using trainee performance metrics and Likert items, and qualitatively with user feedback. Users also reported their times to complete training.

Conclusions: Mean first-attempt simulation-assessment scores were >90% for both training groups. Likert items and comments supported high user satisfaction with the EFS training course. We attribute user performance and satisfaction to our grounding in conceptual frameworks in a collaborative environment. Backward design helped us align course content and assessment with our learning objectives, and Kane's framework helped us provide validity evidence for our assessment.

LP8-02-60867

Quality of life in hospice: Interactions among temporal, occupational, and relational dimensions

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Background/Purpose: Temporality, occupation, and relationships are identified as discrete factors impacting quality of life for individuals at the end of life (EoL) and families; however, educators and practitioners require insight regarding whether their interaction shapes quality of life for these people. This study is framed by an understanding that meaning is negotiated between people through social interaction and occupational engagement in temporal contexts.

We conducted in-depth interviews with 9 patients and 10 family members followed by an iterative analysis process involving open, axial and selective coding.

Summary of innovation: The data highlights variants on temporality related to participants' occupational and relational experiences, and ways that temporality impacts relational and occupational experiences. We explore this within three main processes: 1) experiencing temporal rupture, 2) diminishing significance of clock time, and 3) shifting occupational priorities.

Conclusions: This session provides insight into complex interactions between temporal, occupational, and relational aspects of dying in hospice from patient/family perspectives. Educators, scholars, learners, and practitioners require patient/family insights in order to foster enriching and meaningful EoL experiences. It is important that we are attentive to patient priorities at EoL. By focusing on individuals' reoriented priorities - occupations focused on being, becoming, and belonging - we can address what individuals find to be most meaningful. With these insights in mind, educators may be able to better prepare future and current healthcare professionals to be attuned to the temporal, relational and occupational needs of patients and families at EoL, based not only on our own "expertise" but also that of the people we care for.

LP8-03-59486

Identity formation, mentorship, and paradigm shift of learners to educators: Building a foundation for future medical educators through a Students-As-Teachers curriculum

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Background/Purpose: With increasing expectations for medical students to teach, there is greater focus on medical education training for them. While mounting evidence supports various benefits of Students-As-Teachers (SAT) curricula, limited SAT electives are offered across Canada. We developed a four-week SAT selective for fourth-year medical students at University of Toronto to enhance medical education knowledge and teaching skills. This study aimed to evaluate the SAT program and its impact on students' development as educators, their experience as both learners and educators, and their future involvement with medical education.

Methods: Students participated in highly interactive small group teaching sessions along with teaching opportunities in non-clinical and clinical environments. Course evaluation consisted of pre and post-selective surveys and reflective assignments describing their selective experience and future career aspirations. A theory-based evaluation approach was utilized to compare the SAT program's theory with course outcomes.

Results: Post-SAT selective, students self-reported greater knowledge and confidence in teaching methods, provision of feedback, medical education scholarship, and interest in further medical education training. Student reflections highlighted three key themes. Identity formation as educators and the importance of mentorship in medical education aligned with the initial goals for the SAT elective, while unexpected outcomes included a shifting perception on teaching and feedback from the lens of a learner to that of an educator.

Conclusions: This study's findings demonstrate the ability of a SAT curricula to build capacity for future medical educators. Further studies could utilize realist evaluation to determine what contextual and mechanistic factors influence such outcomes.

LP8-04-59928

Alignment of Regulatory Examinations and Public Health Priorities: Exploring the representation of Cancer in the MCCQE-1

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Background/Purpose: Medical education should be coordinated with patient and health care system needs. Cancer is a relevant health priority. Unfortunately, oncology education has long been perceived by learners, educators, and physicians as inadequate. The Medical Council of Canada (MCC) is Canada's national standard of assessment of medical graduates. This study aimed to view oncology education with a focus on assessment, by determining the representation of health priorities, including cancer, in the Medical Council of Canada Qualifying Examination - Part 1 (MCCQE 1).

Methods: The MCCQE 1 lists CanMEDS roles for medical graduate competency. The focus of this study was the Medical Expert role and associated clinical objectives. These objectives were categorized for oncologic, cardiovascular, cerebrovascular, and chronic lower respiratory disease. Two coders analyzed data to increase objectivity and reduce bias.

Results: The MCCQE 1 objectives list 190 topics in the Medical Expert role. Oncology content was found in 57 (30%), cardiovascular diseases in 56 (29.5%), cerebrovascular diseases in 21 (11%) and chronic lower respiratory diseases in 7 (3.7%). Within the objectives containing oncology content, frequently mentioned cancers were gastrointestinal (16, 23%), nonspecific indicators of cancer (7, 12%) and genitourinary/musculoskeletal cancers (6, 10.5%). All disease coding had interrater agreement greater than 99%, with Kappa values from 0.73 - 1.00, indicating substantial agreement.

Conclusions: Oncology was highly represented in the MCCQE 1. To understand the mismatch between curricular representation and assessments with perceptions of preparedness for practice, future work should investigate components of medical education beyond knowledge expertise and assessment.

LP8-05-60057

In Anticipation of CBD: Building an Integrative, Skills-Based Transition to Practice Curriculum in Psychiatry

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Background/Purpose: Residents in the psychiatry program at McMaster University indicated a desire for a practical, skills-based transition to practice curriculum. With the transition to competency-based medical education and its focus on having a robust transition to practice year, our program was invested creating a novel, pedagogically robust curriculum.

Summary of innovation: A needs assessment was sent out to the PGY-5 residents during the 2018-2019 academic year. The results from this survey informed the development of a 3-session curriculum focusing on: 1) negotiating, contracts and business incorporation, 2) billing and practice management, and 3) transition to practice "nightmares" like audits and college complaints. A curriculum based on cases was developed to reflect these learning needs. External and internal experts, including legal counsel, medical business and billing experts, and experienced faculty were included as teachers. The curriculum included didactic and interactive components anchored to cases and concluding with practical, concept-integration application exercises to enhance knowledge retention and application.

Conclusions: Feedback was sought through session evaluations and a survey following completion of the curriculum. Residents felt the curriculum was helpful and applicable, although noted a preference for earlier delivery. Additional topics of interest were identified. Using a quality improvement approach, the curriculum has now been expanded to 8 sessions including additional application exercises focused on billing, maintenance of certification, and ethical issues. This presentation will provide attendees with an understanding of how to create a practical transition to practice curriculum and will provide examples of the curriculum, including integration exercises used to solidify learning.

LP8-06-60825

Using the Curriculum Densitometer to measure the impact of curricular workload on students' mental health: A pilot study.

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Background/Purpose: Curriculum overload (CO) is a major 21st-century health science education problem, partly due to ongoing curriculum reforms including the growing wealth of knowledge, increasing diversity of the student body, and expanding interdisciplinary programming. Existing evidence indicates that CO has adverse effects on student mental health, but little research exists on practical solutions to address this problem. Our study seeks to assess the feasibility of a new mobile application (Curriculum Densitometer - CD app.) for measuring curriculum load and student stress.

Summary of innovation: A new mobile-web application, called Curriculum Densitometer (from now on referred to as CD app.) was developed specifically to measure course assignment course activity workload and student perceived stress. The CD app. was conceptualized by Dr. Kalyani Premkumar, designed by Jeremiah Acharibasam, and developed by Thai Lee (MSc. student) under Dr. Ralph Deters' supervision. The goal was to use the CD app. to measure course assignment workload (i.e. time - in hours - spent completing an assignment) and perceived stress associated with the workload among students in various courses within the Colleges of Nursing and Medicine at the University of Saskatchewan. The CD app allows instructors to create assignment task time trackers which students of a given class can then use to measure the time it takes them to complete those assignment tasks and rate the related perceived stress involved in completing these assignment tasks.

Conclusions: The data generated by the CD app. can keep instructors informed of student stress experience and help to promote student mental health.

LP8-07-59986

Virtual MacPeds: Leveling up to the new virtual reality of medical education

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Background/Purpose: Virtual MacPeds is an online curriculum created using Kern's six step approach to curriculum development to supplement resident learning during Covid-19. The curriculum included: online lectures, a live teaching calendar that includes links to sessions across rotations and subspecialties, and a resource rolodex with links to online learning materials. The purpose of this study is to evaluate the components of the curriculum that were most useful to residents.

Methods: Virtual MacPeds was piloted from March 2020 to June 2020 to 51 core pediatric residents in PGY1-4 at McMaster University. The Kirkpatrick Model for learning evaluation was used to assess resident reaction to the implementation of the curriculum. A voluntary online survey was emailed to residents with the opportunity to respond from June to July 2020. Descriptive statistics was used to assess learner engagement and perception of the curriculum.

Results: 95% of respondents (n=20) had reduced in-person teaching sessions during Covid-19 and 80% had impacted clinical rotations (self-isolation, virtual care, patient volumes). 95% used the curriculum, all of whom found it helpful in fulfilling learning objectives. 85% of participants attended the online lectures - those who did not attend noted schedule conflict. 100% would use Virtual MacPeds in the future. Participants noted that Virtual MacPeds should include a live teaching schedule (100%), online lectures (84.2%), self-study modules (73.7%), resource rolodex (52.6%) with suggestions for recorded lectures (89.5%) and simulations (57.9%).

Conclusions: Virtual MacPeds is an acceptable and useful supplement to resident learning during Covid-19. Useful elements of the curriculum include online lectures, a live teaching schedule, resource rolodex and self-study modules.

LP8-08-60827

Developing and evaluating the Professionalism Plus longitudinal curriculum in a geriatrics residency program

Bernice Ho University of Toronto, **Arielle Berger** University of Toronto, **Edwin Wong** University of Toronto

Background/Purpose: With high rates of burnout and incivility among physicians and increasing evidence of poor quality of care for marginalized populations, there is a dire need to address professionalism in medical education. A needs assessment in our program identified little-to-no formal curricular time on professionalism, nor other CanMEDS roles including Communicator, Advocate, and Collaborator. We introduced a new longitudinal curriculum for Geriatric residents, "Professionalism Plus", addressing the non-medical expert CanMEDS roles, with a focus on professionalism.

Summary of innovation: The curriculum utilized workplace-based learning theory, ensuring that teaching was relevant to the residents' context and provided practical tools to implement immediately. The full curriculum contained ten sessions offered over two years. Experts from the offices of Resident Wellness and Person-Centred Care Education collaborated with curriculum development and teaching. Thus far, six of ten sessions were implemented, addressing the following topics: resilience, professional identity, communication skills, leadership, and person-centred care.

Conclusions: Immediate learner reactions have been positive, with an average teaching effectiveness score of 4.56/5. Medium-term outcomes were assessed via semi-structured interviews with 8 graduated residents. Interviews revealed three broad themes: 1) Content was relevant to clinical practice and a welcome addition to the formal curriculum, 2) Interactive format offered opportunity to learn from peers and build community, 3) Impact on Professional Development may be limited due to late integration into training. Future work will integrate these findings into future iterations of the curriculum and adapt the curriculum to other residency programs.

Curriculum - Undergraduate

LP9-01-59547

Applied Theatre within Undergraduate Medical Education: A Scoping Review

Bronte Johnston McMaster University, **Hartley Jafine** McMaster University

Background/Purpose: Applied theatre has been integrated within various undergraduate medical education programs within North America to improve students' clinical skills and empathetic behaviours in future physicians. For the purposes of this project, we are defining applied theatre as the use of drama skills within educational practice. Currently, several medical schools across Canada and the United States incorporate a variation of applied theatre within their curriculums. However, there is no compilation of current publications regarding applied theatre and undergraduate medical education; this information would be valuable to further understand the benefits of the intersections of drama and health education. This project offers a scoping review of the current available literature in order to gain a further understanding of applied theatre initiatives and outcomes within undergraduate medical education particularly in relation to the CanMEDS framework.

Methods: Twelve publications were obtained from online databases including: Pubmed, OVID, Web of Science, and ERIC; a specific keyword search was employed: "medical education" and "theatre" (or applied drama or theater), and "North America"(Canada and the USA), and "drama", and "medical students." The articles were critically appraised by the type of applied theatre activities, feedback, future applications of applied theatre initiatives, and qualitative and quantitative results from the studies through thematic analysis.

Results: The current literature demonstrates the positive benefits of incorporating applied theatre within undergraduate medical education based on a variety of applied theatre initiatives. Thematic analysis demonstrated the positive benefits of applied drama with improving undergraduate medical students' communication skills, education, and personal development. The results demonstrated how applied theatre activities overlap with the CanMEDS framework.

Conclusions: The results highlighted the diversity and importance of applied theatre initiatives within medical education and how it should be further incorporated in curricula.

LP9-02-60780

A Rapid Review of Prescribing Education Interventions

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Background/Purpose: Many studies conducted on the causes and nature of prescribing errors have highlighted the inadequacy of teaching and training of prescribers.

Subsequently, a rapid review was undertaken to update on the nature and effectiveness of educational interventions aimed at improving the prescribing skills and competencies

Methods: 22 studies taking place between 2009 and 2019 were identified across nine databases. Out of 1,137 papers, 58 papers were selected for full-text screening, from which 22 papers were included in the review.

Results: This review reinforced the importance of the WHO Guide to Good Prescribing to prescribing curriculum design as well as the effectiveness of small group teaching. However, it also highlighted the lack of innovation in prescribing education and lack of longitudinal follow-up regarding the effectiveness of prescribing education interventions.

Conclusions: Prescribing curricula needs to adapt and evaluate the scope of implementing educational approaches which utilize innovations such as virtual reality and explore areas where students can commit errors in a safe environment and learn from these to better their prescribing skills in preparation for real-life clinical practice.

LP9-03-59981

Women's Cardiovascular Health in the Undergraduate Curriculum

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Background/Purpose: Heart disease is the leading cause of death among Canadian women. However, early heart attack signs are consistently missed in up to 78% of women, with providers identifying a need for increased training in women's hearts (Heart & Stroke Foundation, 2018). In fact, the Heart and Stroke Foundation of Canada recently called for Ontario medical schools to incorporate gender considerations into the undergraduate curriculum. We sought to evaluate our institution's pre-clerkship cardiovascular unit for any gender-specific education needs.

Methods: We identified all cardiovascular learning events in our institution's pre-clerkship curriculum using keywords including "acute coronary syndrome", "heart failure" and "cardiovascular disease". Our analysis identified eleven relevant learning events, which we mapped to the Women's Health Competencies published by the Association of Professors of Obstetrics & Gynecology (APGO). Next, we reviewed management guidelines from the Canadian Cardiovascular Society

(CCS), clinical trials and high-quality reviews in acute coronary syndrome to summarize gender-specific considerations across multiple cardiovascular disease settings.

Results: Our curriculum mapping identified areas of improvement in 5 of the 9 APGO Women's Health Learning Objectives. Two of these learning objectives focused on gender-specific differences in heart failure, two were related to acute coronary syndrome and atherosclerosis, and one covered epidemiological differences. A review of all CCS guidelines revealed that gender specific guidelines have been published for heart failure and valvular disease in pregnancy. However, no specific information has been published yet on the presentation and management of ACS in women, despite known differences in risk factors, symptoms, and underlying pathophysiology. Finally, current research indicates that there is a need to address provider bias when ordering investigations, prescribing medications, and referring to rehabilitation programs after acute coronary events in women.

Conclusions: As medical students, we recognized gaps in our training regarding care for women's hearts and identified specific areas of improvement. We are currently working with the curriculum coordinator to integrate Women's Cardiovascular Health content throughout the undergraduate curriculum, with lectures, small group sessions and relevant clinical skills scenarios. We envision that our methodology can be applied by other medical students across Canada to ensure that gender considerations are addressed in cardiovascular curriculums across the country.

LP9-04-59983

Reviewing non-cancer pain & opioid prescribing curriculum using INSPQ competencies

Michelle Gibson Queen's University, **Portia Tang** Queen's University

Background/Purpose: In view of Canada's opioid crisis, we reviewed the undergraduate curriculum at our institution to determine if it reflects current attitudes, beliefs & knowledge in opioid prescribing & related topics.

Methods: Learning events within the 'Pain' and 'Substance Abuse' integrated threads were extracted & analyzed from our learning management system. Content in each learning event was summarized & compared to medical competencies published by the Institut National De Santé Publique Du Québec (INSPQ) in non-cancer pain management & opioid prescribing.

Results: 26 learning events related to 'Pain' & 12 learning events related to 'Substance Abuse' were identified. The INSPQ describes 4 clusters of competencies: 1. Basic epidemiological, clinical & pharmacological knowledge relevant to non-cancer pain & opioids, 2. Evaluation of pain intensity & consequences of pain, 3. Evaluation of substance abuse & misuse, & 4. Management & follow up in patients using opioid therapy. Most (6/7) competencies within the first cluster were covered in the curriculum. Almost half (2/5) of competencies related to the second cluster were not explicitly covered, & 3/7 of competencies related to the third cluster were not covered. A third (3/9) of competencies within the fourth cluster were not explicitly covered.

Conclusions: Our curriculum addresses competencies needed to manage non-cancer pain & prescribe opioids. This initial review identified potential gaps in other core competencies pertaining to opioids & related topics, such as substance abuse. Limitations to our review are that we could not analyze untagged learning events or new sessions. Next steps will include consultation with stakeholders to determine the extent of gaps in the curriculum and how they can be filled.

LP9‑05‑59984

Optimizing Case-Based Learning: An evaluation of tutor and first year MD student perceptions of group size and format variations

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Background/Purpose: In 2016, Case-based Learning (CBL) was integrated into the first two years of the University of Toronto's MD Program. Since then, iterative CBL delivery revisions have included variable CBL group sizes: small (8-10 students) and intermediate (46-60 students), and variable CBL formats: patient-narratives (detailed written dialogues between patients and medical students eliciting histories and physical exam findings) and case-reports (succinct patient history and physical examination summaries). First-year medical student and physician tutor experiences with these CBL formats and group sizes were explored to gain insight into their strengths and limitations for clinical skills training.

Methods: A mixed-methods evaluation approach using surveys, focus groups, and interviews was employed. Survey responses were reported as means and standard deviations. Descriptive thematic analysis was conducted for narrative data. Tutor and student focus group, survey, and interview data were triangulated.

Results: Thirty-eight first-year medical students (14% response rate) and twelve physician tutors (15% response rate) completed surveys. Four student focus groups (n=28) were conducted. Three physician tutors participated in interviews. Students and tutors felt small-group CBL superseded intermediate-group CBL in fostering safe and engaging learning environments. Both groups appeared to benefit from combined CBL formats, recommended use of patient-narratives during early months of training, and highlighted the role of tutor continuity in fostering a safe and tailored learning environment.

Conclusions: Study results have useful implications for health profession education programs such as ours developing CBL curricula; recommendations can help promote safer and more effective CBL learning and teaching experience.

LP9‑06‑60314

Student-Led Curriculum Innovation: Implementing Training on Medication Safety in Transitions of Care, Polypharmacy and High-Risk Situations in Undergraduate Medical Education

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Background/Purpose: Unsafe medication practices and medication errors are a leading cause of injury and preventable harm worldwide. In response, the World Health Organization (WHO) launched its third Global Patient Safety Challenge: Medication Without Harm. Three key action areas associated with substantial morbidity and mortality were highlighted for improvement of medication safety - transitions of care, polypharmacy and high-risk situations. As such, it is crucial for medical students to achieve competency in medication safety while prioritizing these three areas.

Summary of innovation: The current MD Program curriculum was reviewed to determine coverage of the content of interest. The review process revealed content is sparse, with only limited material on medication safety in polypharmacy in the year 4 Geriatrics clerkship. Subsequently, a scoping review was performed to identify best practices in medical education. Guided by the literature, learning objectives and an eLearning module were developed for integration in the clerkship curriculum. Importantly, the use of case vignettes

resembling common clinical scenarios link theory to practice and enable practical application of concepts. Knowledge is assessed on the final, fourth-year comprehensive examination. For evaluation, a pre-survey determines students' awareness and a post-survey assesses impact.

Conclusions: This innovation addresses a major curriculum gap and equips medical students with early and essential training to combat the significant risks unsafe medication practices pose to patient health and safety. This project will raise awareness at other institutions who may also be lacking curriculum coverage of this crucial topic, and it may serve as an effective model to inform curriculum design and development.

LP9-07-60511

'Medical Education By and For Us': Using a Participatory Approach to Address Learner Mistreatment in Medical Education

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Background/Purpose: Learner mistreatment is pervasive in medical education. Despite institutional efforts, medical students often report feeling disengaged or patronized by traditional curricular initiatives to prevent mistreatment. This is particularly true for learners from underrepresented and minoritized groups, whose experiences are seldom captured by dominant institutional narratives.

Summary of innovation: Using a Freirean dialogical and participatory approach, a team of diverse medical students collaborated with faculty and staff to co-develop a two-hour workshop on learner mistreatment. This novel workshop is newly included within the second year undergraduate MD curriculum; it features a didactic lecture, facilitated small-group discussion, and participatory interpersonal skills training. Using principles of participatory scholarship, learners were actively engaged from research to delivery: leading the literature review, developing the learning objectives, and co-facilitating small-group discussions.This approach enabled early feedback and the generation of shared insights; it challenged traditional power differentials of knowledge production. The design aimed to capture students' lived experiences and to reflect the nuances of navigating hidden curricula of medical education through a minoritized lens.

Conclusions: This Freirean-influenced model has implications for our local approach to medical education development. We advocate for the implementation of participatory design in all medical education initiatives that draws from lived experience, such as those related to professionalism, wellness, and cultural safety. This model could also be extended to development of 'medical expert' content, which has historically estranged learners and patients from the knowledge-production process.

Curriculum – Undergraduate

LP10-01-60517

The Art of Infographics: Design and Content Appraisal

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Background/Purpose: Infographics are visual representations that present complex information quickly, clearly, and effectively to an audience compared to pure text (Picture Superiority Effect). Infographics are becoming more prevalent as a learning tool in education, to advise patients about their condition and treatments, and to deliver public health messages. Although an infographic can enhance patient's decision-making capabilities and improve the physician-patient relationship, information on how to create effective infographics are not discussed as part of medical education curriculum. The goal of this project was to analyze current literature to determine characteristics of an effective infographic that increases data cognition and supports knowledge translation and physician-patient communication.

Methods: As the preliminarily search revealed few papers in medical education literature, the search (published and grey) was extended to other disciplines, specifically economics and science. Ten articles which discussed characteristics of a high-quality infographic were reviewed.

Results: Based on our results, five major themes on the evaluation of infographics were identified: purpose/message, audience, design (balance and visual complexity), textual content, and organization. Next, a rubric to evaluate infographics was developed, using a Likert scale.

Conclusions: In education, infographic development may increase student engagement, retention, and communication skills. This literature review led to the creation of a rubric for infographic appraisal. This was the first step in a larger project focused on designing an educational intervention for medical students, which will lead them through the development of infographics using empathy and human-centered design theories to achieve patient-centered communication.

LP10-02-60535

Psyched Up or Psyched Out? - Perspectives on Psychiatry Recruitment in Canada

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Background/Purpose: Previous research revealed that many medical students solidify psychiatry as their specialty during medical school. However, few studies have explored the nature of assessments during psychiatry clerkship and their impact on recruitment. We postulated that schools with more mandatory encounters (MCE's) in their clerkship psychiatry block would be associated with higher psychiatry recruitment.

Methods: 2011-2019 data from the Canadian Residency Matching Service (CaRMS) were examined from 25,558 students. The average psychiatry match rate was calculated for each medical school and nationally. 95% Confidence Intervals (95%CI) and trends from the highest & lowest recruiting rates were determined. Psychiatry Clerkship Rotation MCE's were obtained from each school and analyzed for required diagnoses, amount of exposures, & flexibility of completion in other rotations. These data, as well as data from integrated clerkship programs, were compared to recruitment rates for potential correlations.

Results: The 2011-2019 national recruiting average was 5.23% (95%CI = 4.85%-5.73%), and R2=0.88. Schools above the upper 95%CI include Calgary(6.8%), Sherbrooke(6.3%), Laval(6.5%), and NOSM(6.8%). McGill(3.4%), Western(4.0%), Queen's(4.1%), and Saskatchewan(4.5%) were below the lower 95%CI. 88.9% of schools below the national average allow for MCE completion in other specialties; 71% offered integrated clerkships for students. 8 schools required MCE completion within a psychiatry rotation; 7/8 recruited above the national average.

Conclusions: Despite MCE differences across universities, there was no concrete association between quantity of exposures and recruitment. However, a clear correlation exists between flexibility of MCE completion in other rotations and recruitment. A similar trend was noted for schools offering integrated streams.

LP10-03-60561

What Should Medical Students Learn About Nutrition? Evaluating the Quality of the University of Alberta's Medical Nutrition Curriculum

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Background/Purpose: Nutrition education in undergraduate medicine is insufficient. The purpose of this review was 1) map the nutrition concepts in years 1 and 2 at the University of Alberta medical school (UofA), 2) identify ideal nutrition curriculum content and 3) identify deficiencies of the UofA nutrition curriculum.

Methods: A literature review was conducted using search terms "medical education", "nutrition", and "curriculum." Selection criteria for review: Published since the year 2000; related to mandatory pre-clerkship education; specifically related to curriculum content; and pertaining to North American medical schools. The year 1 and 2 nutrition curriculum was mapped by searching all lecture learning objectives for nutrition keywords. Lectures containing nutrition concepts were reviewed. The nutrition concepts identified in the curriculum were compared to literature recommendations.

Results: Initial search identified 375 studies, 14 met the search criteria. There was no ideal nutrition curriculum for medical schools identified nor consensus on optimal nutrition knowledge. However, four themes were identified: i) nutrition should be incorporated longitudinally into medical education, ii) students are open to a variety of teaching methods; iii) multidisciplinary teaching methods are valuable; and iv) nutrition education should align with global recommendations for sustainable and health promoting dietary patterns. A 2002 compilation by the Curriculum Committee of the Nutrition Academic Award Program (NAA) contained the most comprehensive recommendations for a nutrition curriculum. A total of 107 recommended learning objectives based on this guide were compared to the UofA curriculum map. 58.0% were addressed completely, 18.7% were partially addressed, and 23.4% were not addressed.

Conclusions: The nutrition curriculum at the UofA medical school is adequate, however, 42% of the curriculum needs review based on the NAA curriculum. There is insufficient data on optimal nutrition education for medical students with no ideal unified curriculum identified.

LP10-04-60731

Evaluation of a User-Centred Design Session for Undergraduate Medical Students

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Background/Purpose: User-centered design has emerged as a novel problem-solving methodology centered around empathy, creativity, and co-designing with end users, with many applications in healthcare. Patient-centred interventions are associated with patient safety and clinical effectiveness in a wide range of diseases, settings, and study types. Additionally, user-centred design has been formally taught in other disciplines and at several American medical schools.

Summary of innovation: In this study, we conducted an educational intervention teaching 260 second-year medical students at the University of Toronto the basics of user-centred design.The intervention consisted of a 45-minute didactic lecture on design thinking principles and applications to healthcare, a 15-minute patient interview describing the gaps in their healthcare journey, and a two-hour small group workshop led by 15 healthcare professionals who were trained as facilitators for the session. During the workshop, students practiced the principles of empathizing, defining, ideating, and creating low-fidelity prototypes.

Conclusions: To our knowledge, this is the first time that user-centred design has been incorporated into the formal curriculum at a Canadian medical school. Evaluation included post-workshop debriefs with facilitators and post-workshop feedback by participants. Students reported enjoying the creative problem solving process but requested more specific themes or problems to solve. Facilitators gave very positive feedback and felt that the students were engaged. Suggestions for future years included coupling smaller groups of students with patients, having volunteer physicians as end-users or evaluators, and implementing a showcase or pitch competition. These lessons are important for anyone seeking to teach user-centred design for medical practitioners across the country.

LP10-05-60747

Global Health in Canadian Undergraduate Medical Education: A Scoping Review of Best Practices and Call to Action

Shawna O'Hearn Dalhousie University, **Emma McDermott** Dalhousie University

Background/Purpose: Global health is becoming an increasingly important field in our ever-changing global climate and for more than a decade there have been calls for increased global health education in undergraduate medical curricula. This scoping review serves to provide an update on the progress of Canadian undergraduate medical education to incorporate global health

Methods: With the aim to identify the best practices and existing knowledge gaps for integrating global health into undergraduate medical curricula, we conducted a comprehensive search of PubMed, Embase, CINAHL, and ERIC in June 2020 yielding 195 articles. Inclusion criteria included articles that focused on undergraduate medical training in Canada, those that address global health topics, and were published in the last ten years. Articles in both English and French were considered. After the removal of duplicates and screening, 33 articles remained. Grey literature sources were also searched, adding additional documents to the results.

Results: The final articles were synthesized based on three themes: core curriculum, international electives, and extracurricular activities. Out of the final 33 articles, 60% focused on international electives, where about 1/3 of these highlighted the ethical dilemma surrounding international global health electives and 1/4 focused on inconsistencies in pre-departure training. Only 7 of the articles focuses on core undergraduate curriculum, all of which were published in 2015 or earlier, which draw further attention to a gap in current research.

Conclusions: These results re-assert the need for improved global health education in medical education and act as a call to action for medical educators. This has led to further research analyzing global health education programs.

LP10-06-60801

Behind the Scenes; Workshopping an MD Learner Mistreatment Workshop

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Background/Purpose: Medical student mistreatment is an international issue spanning clinical training programs. To reduce mistreatment, institutional/curricular interventions are implemented and evaluated, but development processes remain nebulous. We describe our development process of an evidence-based educational learner mistreatment intervention for an undergraduate MD curriculum that considers contextual needs. This process spans literature review, learning objective identification, content curation, and delivery.

Summary of innovation: A working group of student and faculty members implemented a three-phased process to develop a Mistreatment Workshop and evaluation plan. First, a student-led working group conducted a scoping review of the literature to identify best practice in content, assessment, and evaluation of curricular interventions that address learner mistreatment across health professions programs. Second, data gathered by the MD program to understand the extent and nature of learner mistreatment were reviewed. Finally, workshop content and learning objectives were iteratively refined through stakeholder (faculty members, learners, workshop facilitators, MD program curriculum committee) consultation.

Conclusions: Several interventions exist to address learner mistreatment in medical education; however, the process and reasons underpinning intervention development and evaluation are infrequently described. Using the development of the MD Learner Mistreatment Workshop as a case example, we demonstrate how to curate workshop objectives that are grounded in reported literature, local institutional data, and meaningful involvement of learner and faculty stakeholders. This process could be adapted to other settings to address mistreatment education.

LP10-07-60931

Educational Interventions Aimed at Teaching Management of Patients with Obesity in Undergraduate Medical Education: A Systematic Review

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Background/Purpose: The growing obesity epidemic requires an evidence-based approach to management of patients with obesity. Two systematic reviews on obesity-management interventions in undergraduate medical education, both published in 2012, reported discrepant findings. This study aimed to build on previous research by identifying and systematically reviewing current literature on educational interventions aimed at teaching management of patients with obesity to medical students.

Methods: The authors systematically searched the databases: Web of Science Core Collection, Embase Classic + Embase, MEDLINE(R) via Ovid, PsycINFO, ERIC, ProQuest Dissertations and Theses Global, and Cochrane Central Register of Controlled Trials. No language or date restrictions were applied. Retrieved records were screened, critically appraised, and a narrative synthesis of eligible articles was conducted.

Results: Database searching identified 6462 studies; 5373 (83%) were screened against title and abstract, 156 (2.4%) full-text articles were retrieved, 31 (0.5%) met PICOS eligibility criteria, and 17 (0.26%) were included after critical appraisal. Study designs included 9 cohort-studies, 3 qualitative, 2 case-controls, 2 mixed-methods, and 1 RCT. Of the interventions described, 9 were a mandatory part of the curriculum, 6 taught behaviour change techniques, and 5 provided feedback to students. Overall, findings demonstrated an increase in the number of studies describing educational interventions aimed at teaching management of patients with obesity to medical students.

Conclusions: The results of this systematic review can be used by medical educators to inform the design of educational interventions focused on management of patients with obesity in undergraduate medical curricula.

IPE & Professionalism

LP11-01-59734

Exploring helping behaviours in complex clinical teams: A scoping review of the literature

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Background/Purpose: Contemporary healthcare teams are complex and dynamic. Team members frequently encounter challenges that require seeking assistance from inside and outside the team. Despite how commonly help-seeking behaviours are encountered, understanding the complexities in the provision and receipt of help within interprofessional teams is underdeveloped in the health professions literature. The experiences of other team-based professions, such as business and engineering, might offer insight into these challenges.

Methods: We undertook a scoping review to explore how helping behaviours in professional teams have been studied and are understood. This methodology offers a systematic way to identify, map and review existing knowledge. We screened over 18,000 citations gleaned from three databases. Once inclusion criteria were satisfied, 49 articles for study inclusion remained.

Results: Our review suggested three features of the helping phenomenon related to the provision or receipt of help within teams: 1) ways that help is defined and enacted, 2) personal, situational, and organizational factors that shape how this occurs and, 3) discursive contexts of help including ideas around reciprocity, rationalization and resonance. Our review uncovered a lack of literature that details naturalistic work teams (i.e. not artificially created) in both health care contexts and other professional domains of literature.

Conclusions: Understanding helping behaviours is essential to encourage and support optimal functioning of clinical teams. Insights derived from other team-based professions adds to our understanding of how help is sought and provided within teams. This knowledge can influence initial education and professional development initiatives to establish and enhance helping behaviours within clinical teams.

LP11-02-60754

Addressing Cost-Related Nonadherence: Our Experiences Supporting Patients in a Tertiary Healthcare Organization

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Background/Purpose: The foundation of Canada's health care system is the notion of universal access, which means all citizens have access to medical care according to need rather than ability to pay. This idea, however, does not capture the system's complexities. While the system covers the full costs of hospitalizations, diagnostic tests, and physician visits, prescription medication is not covered. When a patient cannot afford and therefore does not take their prescribed medication, it is called cost-related nonadherence (CRNA), which is the subject of my study. My thesis explores organizational approaches to supporting patients who face financial barriers to medication. I ask how might an organization systematically support patients facing CRNA to prescription medication?

Methods: For my study I used action research and knowledge translation as the methodological framework and borrowed methods from design thinking, to engage key stakeholders to explore solutions to CRNA. I engaged multidisciplinary stakeholders from Vancouver General Hospital including physicians, nurse practitioners, directors, managers, nurses, social workers, pharmacists, researchers and patients, in a two-day Medication Affordability Workshop. The Design Thinking methods included, expert presentation, brainstorming, dotmocracy, S.W.O.T analysis, and road mapping.

Results: Data was categorized and themed, in order to identify patterns. Based on the patterns, results found that experts wanted to focus on drug plan enrollment solutions, everyone engagement, and development of a specialized role to support patients facing CRNA.

Conclusions: Addressing CRNA requires a collaborative effort amongst key stakeholders which includes education, engagement, and development of actionable strategies to support patients.

LP11 - 03 - 60222

A Pilot Study on the Effectiveness of an Interprofessional Education Course at Teaching the Importance of Choosing Wisely and Resource Stewardship

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Background/Purpose: Rising healthcare costs and an increase in unnecessary testing has sparked interest in resource stewardship (RS) and subsequently the Choosing Wisely Canada (CWC) campaign. Currently, all Canadian medical schools have student representatives for CWC, however the same is not true in other health professions. Interprofessional care learned through interprofessional education (IPE) can lead to better patient outcomes. The present study assessed whether an IPE course for health profession students was effective in teaching undergraduate students both interprofessional competencies and CWC principles.

Methods: An approximately 7 hour long, 4 session course was administered to Dalhousie University health profession students (N= 30). A validated survey for IPE competencies and a general survey about CWC principles were administered to assess the course. Descriptive statistics were used to assess the general CWC views, and paired samples T-tests were employed to compare pre- and post-IPE competencies.

Results: 25 students (83%) completed the full survey. Of these, 52% were female, within five health disciplines, and 13 (52%) had heard of Choosing Wisely prior. Overall the students agreed that CWC was important and was relevant to their profession. They also reported significant improvements in multiple interprofessional education competencies, including communication, collaboration, roles and responsibilities, patient-/family-centered care, conflict management/resolution, and team function.

Conclusions: Participants in our pilot Choosing Wisely IPE course valued the importance of the CWC campaign and reported improvement in multiple IPE competencies. This adaptable, simple, and low-cost course may be an effective way to integrate RS teaching across multiple health professions.

LP11 - 04 - 60632

Enhancement of Professional Values in medical education: Expert opinion

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Professional values have important impact on Medical practice and Internalization of these values is critical for medical educators. This study aims to investigate the medical education experts' viewpoint about the ways professional values should be taught and learned as a step towards the enhancement of professional values in medical education.

Methods: The qualitative study focused on the experiences of medical education experts on the values of the medical profession and the way these values should present in the medical curriculum in panel discussions in Iran, 2019. All sessions were audio-recorded, transcribed, and analyzed using thematic analysis.

Results: The analysis revealed four main themes related to the Enhancement of Professional Values in medical education: 1) integrating Professional values into the general medical curriculum as a longitudinal theme, 2) value-based Educational strategies, 3) contextual effect in professional values education,4) strengthening the hidden curriculum.

Conclusions: The concepts of value-based practice (VBP) and value-based Medical education (VBME) should be integrated into medical education as a longitudinal theme. Specifically, the enhancement of teaching professional values and its assessment in the clinical phase is recommended. To address the Internalization of the professional values in medical students, the main factors, i.e., value-based teaching and learning strategies, contextual values, and executive resources for strengthening the hidden curriculum should be considered. In conclusion, developing a VBP and VBME would be necessary, and enhancing the professional values in Medical education recommended.

LP11 - 05 - 60527

Identifying the state of social accountability at the University of Ottawa, Faculty of Medicine through an internal environmental scan

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Background/Purpose: The social accountability of medical schools is their obligation to address the priority health concerns of communities they serve, as identified together with governments, health care organizations, health professionals, and the public. Canadian faculties of medicine report regularly on their activities in this area, but it is unclear if communities are able to identify their needs in these processes.

Methods: We conducted a 10-week internal environmental scan of social accountability at the University of Ottawa Faculty of Medicine (FoM). We used available data sources to collect activities across domains of admissions, community outreach, curriculum, clinical service, professional affairs, and innovation and research. We analyzed data quantitatively by Faculty categories, values expressed, populations, and social obligation. We conducted thematic qualitative analysis of a small number of solicited project descriptions.

Results: Of 729 data items collected, 560 related to social accountability. Half of the items were classified in the Education category (281/560, 50.2%), with the vast majority falling under the curriculum domain (271/281, 96.4%). The values most frequently expressed were "quality" (293/560, 52.3%) and "partnership" (265/560, 47.3%), and the most frequently mentioned populations were "marginalized" (153/560, 27.3%), "Indigenous" (96/560, 17.1%) and "Francophone" (76/560, 13.6%). Only 17.1% (96/560) of all items were deemed socially accountable. In the qualitative analysis, partnership and maintaining relationships was again recognized as essential, as was a focus on priority health needs and populations.

Conclusions: Some FoM activities are clearly socially accountable. Other domains could benefit from a greater emphasis on engagement and identification of priority health needs.

LP11 - 06 - 60610

We have work to do! Medical learners and speaking up to positions of power

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Background/Purpose: In medical education the learner environment has been identified as an area for improvement. Environments where mistreatment exists can have negative consequences for learning. For instance, if learners do not feel safe to speak up, if they are fearful of being humiliated by someone in a position of power, or if they have concerns about negative career consequences. Mistreatment can also limit learners in reporting patient safety issues therefore, silence and self-censorship may have serious consequences. This study sought to identify medical learners' comfort level in speaking up to faculty members, nurses, residents, administrators and patients.

Methods: A cross-sectional online survey targeted 440 UGME learners at the University of Manitoba, (32% participation rate). After data editing, a logistic regression analysis was conducted on a sample of 123 learners.

Results: Male learners were more comfortable then female learners in speaking up to faculty members (OR=4.5), nurses (OR=2.6), residents (OR=2.4) and administrators (OR=4.8). Caucasian learners were more comfortable speaking up to administrators (OR=2.8) than racialized learners. First generation learners were less comfortable speaking up to both patients (OR=-2.9) and residents (OR=-2.9).

Conclusions: This study showed that women learners, racialized learners, and first-generation learners were less likely to be comfortable speaking up to positions of power. Given the increasing diversity of medical learners and the importance of speaking up regarding mistreatment, this is an important finding. It suggests a need for interventions to increase learner comfort with speaking up, and to address the conditions leading to the observed gender disparity.

Teaching & Learning - Postgraduate

LP12 - 1 - 60735

Physicians first: simulating medical emergencies in psychiatric settings

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Background/Purpose: Simulation is widespread in medical education yet remains underutilized in psychiatry. This technique may be particularly useful for practice managing infrequent and emergent events, such as medical emergencies in psychiatric settings. Psychiatry residents at McMaster expressed a desire to increase their knowledge and skills in encounters where acute medical management is required. In response, an innovative interdisciplinary simulation curriculum addressing these needs was developed.

Summary of innovation: An interdisciplinary group of educators from psychiatry and emergency medicine developed a novel medical psychiatry curriculum for first-year psychiatry residents. This involved two simulations of common medical emergencies in psychiatric settings, including seizures and undifferentiated tachycardia. The focus was on medical expertise, communication, and collaboration skills necessary for initial management. A standardized format for communicating with consultants was introduced, similar to those used in emergency medicine training. A unique feature of these simulations is that sessions were co-facilitated by educators from psychiatry and emergency medicine and included interprofessional staff as partners in the learning experience.

Conclusions: Psychiatrists need to be prepared to manage medical comorbidities in psychiatric settings and simulation provides an opportunity to safely practice and enhance these skills. This is the first use of simulation in our psychiatry training program. Our work contributes to a small but growing body of literature on the use of simulation in psychiatry, with an emphasis on medical psychiatry and the unique opportunities this presents for interdisciplinary collaboration. This presentation will give educators insights into our development process, which they can then apply to their local curricula.

Enhanced clinical opportunities for Junior Pediatric Residents during admissions from the Emergency Department to the Clinical Teaching Unit at the Alberta Children's Hospital

LP12 - 2 - 60916

Junior Pediatric Residents Satisfaction and Confidence in Making Clinical Decisions

Laura Davies University of Calgary, **Michelle Bailey** University of Calgary, **Jovana Milenkovic** University of Calgary, **Roopa Suppiah** University of Calgary

Background/Purpose: To prepare physicians for independent practice, residency training programs must provide its trainees adequate opportunities to practice making clinical decisions. The University of Calgary Pediatrics Residency Program is working to enhance clinical decision-making opportunities for junior pediatric residents (JR). To date, the patient admission process from the emergency department (ED) to the general pediatrics clinical teaching unit (CTU) has been a senior resident-led role, which ensures safety and efficiency; however, JRs have not been optimally positioned with respect to their role in admissions to practice making clinical decisions.

Summary of innovation: Using quality improvement methodology, a series of interventions were implemented into the Alberta Children's Hospital's ED to CTU admission process from August 2019 to June 2020. Online surveys administered to JRs assessed baseline, midway and final time point levels of JR satisfaction with their role in the admission process and JR confidence with their ability to complete an initial patient assessment independently, place admission orders and make decisions on patient care for admissions.

Conclusions: Compared to baseline, final time point levels of JR satisfaction and confidence were increased. Importantly, perceived patient safety in and efficiency of the admission process, measured via online surveys of senior residents at baseline, midway and final timepoints, were greatest at the final time point. These results suggest the interventions implemented in this study were of benefit to JRs. Residency training programs elsewhere can apply the same or similar interventions to enhance clinical decision-making opportunities for residents.

LP12-3-60933

Narrative review of the use of the Motivated Strategies for Learning Questionnaire in health professions education

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Background/Purpose: Exploration of the learning strategies and approaches of learners is an emerging area of interest in health professions education (HPE) research. In studies about learning strategies and motivation of HPE learners, validated measurement tools from the educational psychology literature are often used. One of the most commonly used instruments to measure motivation and learning is the Motivated Strategies for Learning Questionnaire (MSLQ). The MSLQ has been validated for use with postsecondary populations. Because of this, the MSLQ is assumed to be appropriate for use with HPE learners; however, MSLQ items may need to be adapted for this population. The purpose of this narrative review is to come to a greater understanding of how the MSLQ is being used in HPE research.

Methods: A literature search was carried out using the following search terms, for articles published 2015-2019: "Motivated Strategies for Learning Questionnaire" or "MSLQ", "validity" or "valid" or "evidence of validity", and "medical education" or "medical students". Searches also included the use of the keywords "adapted questionnaire" or "adapted". Identified articles were reviewed by two researchers, and findings were entered into a database.

Results: Twenty-three articles met inclusion criteria. In all but three studies, the MSLQ was either used with its original wording, or items were reworded for the HPE context but the validity of the adapted measure had not been tested.

Conclusions: There is a need for a validated version of the MSLQ that has been adapted for HPE contexts.

LP12-4-59931

Applicabilité et appréciation de l'utilisation de la méthode de révision inversée par des résidents à l'urgence

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Background/Purpose: La révision des cas évalués par un résident avec son superviseur se fait traditionnellement par la méthode de supervision classique. Dans un contexte d'urgence, les contraintes de débit rendent le temps disponible à la supervision limité. La méthode de révision inversée a l'avantage d'être efficace en amenant l'étudiant à se prononcer et à justifier ses impressions cliniques dès le début de la supervision. L'objectif de ce projet est d'évaluer l'appréciation et l'applicabilité de la méthode de supervision inversée par des résidents à l'urgence.

Methods: Il s'agit d'une étude prospective unicentrique impliquant vingt superviseurs et vingt-trois résidents. La méthode de révision inversée fut utilisée pour tous les cas rencontrés sur des quarts cliniques prédéfinis. Un questionnaire était complété après chaque quart et un sondage fut rempli à la fin du projet . Une analyse qualitative thématique des commentaires et des statistiques descriptives furent effectuées.

Results: 76% des résidents ont affirmé apprécier la méthode et 72% ont noté que celle-ci leur procurait un enseignement équivalent ou supérieur à la méthode traditionnelle. 83% ont trouvé le processus de révision plus efficace (temps). Plus de la moitié ont souligné que cette méthode leur permettait de mieux explorer leur processus diagnostic et leur procurait davantage d'autonomie. Toutefois, plusieurs ont noté que cette méthode était difficilement applicable pour les cas les plus complexes ou en situation d'incertitude, surtout les résidents juniors.

Conclusions: La méthode de révision inversée semble appréciée par les résidents en contexte d'urgence. Son applicabilité varie selon la complexité des cas rencontrés et le niveau du résident.

LP12-5-59965

Beyond Skin Deep: Electronic Case-based Learning Modules to Teach Multidisciplinary Care in Dermatology among Clerkship Students

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Background/Purpose: Given the high prevalence of skin conditions, understanding the basics of dermatology is crucial for graduating medical students. Most Canadian medical schools offer limited clinical dermatology training as part of their clerkship curriculum. Medical students have sparse opportunities to understand the strong relevance of dermatology to other medical and surgical areas of medicine.

Summary of innovation: To fill the educational gap, a team composed of an academic dermatologist, a dermatology resident, and a medical student co-designed case-based learning modules for clerkship students. The format of the modules was developed after an evaluation

of various frequently used online learning resources among clerkship students. The learning modules are stepwise and case-based, composed of 8-10 multiple choice questions with detailed explanation, learning objectives and take-home messages. The content emphasizes multidisciplinary care in dermatology and centers around patients with different socioeconomic status and skin color. Some examples of the topics include vulvar lichen sclerosus (gynecology), hair loss from trichotillomania (psychiatry), cutaneous and ocular rosacea (ophthalmology), and pemphigoid gestationis (obstetrics). The modules have been launched on the Division of Dermatology website of the University of Alberta, with more modules being developed.

Conclusions: These are the first case-based learning modules in North America designed to help clerkship students better understand the multidisciplinary care in dermatology. The modules would also help students better approach, diagnose, and manage skin conditions, leading to improved patient care. This innovation also provides insight into ways that medical schools could increase their dermatology education when clinic teaching resources are limited.

LP12 - 6-59993

Teaching Low-Risk Obstetrics: Current Practices in Canadian Residency

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Background/Purpose: Family Medicine Low-Risk Obstetrics (FM LRO) has been shown to result in similar health outcomes as that provided by obstetricians. Women and families who have received FM LRO care value the high level of continuity of care it provides throughout their pregnancy and delivery. In 2007, a national survey from the CPFC showed that only 11.1 % of family physicians were offering intrapartum care, which is attributed to multiple factors. The Family Centred Maternity Care (FCMC) program at Memorial University exists to provide quality care while training family medicine residents to provide FM LRO care in order to help elevate the role of FM LRO in medicine. As part of an ongoing program evaluation of FCMC, a cross-Canada environmental scan has been of Canadian family medicine residency programs to characterize the FM LRO portion of their postgraduate training

Methods: An online survey composed of 15 multiple choice and free text response questions was distributed to the program directors of the 17 family medicine residency programs in Canada to determine if and how FM LRO is incorporated into their programs. Online survey using Qualtrics was distributed via email invitation to all Canadian Family Medicine Residency Program Directors.

Results: Obstetrical teaching in FM residency was carried out in various ways, with 65 % having exposure during both years of residency, including 71 % with a designated obstetrical block. Throughout this training 64 % have simulations, 77% have procedural training, 89 % have didactic lectures, and 56% partake in some other form of training

Conclusions: FM LRO is an important and rewarding component of family medicine, however training still presents some difficulty. This qualitative study will help to improve how FM LRO training is offered in residency.

LP12 - 7-60519

Impact of stress on the performance of neonatal endotracheal intubation: a randomized controlled trial on manikins.

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Background/Purpose: Although a required skill in pediatric residency programs, success rate of neonatal endotracheal intubation (NETI) among trainees is low. NETI is taught using simulation with limited short-term retention of skill. In the clinical setting, NETI is associated with stress, which effect on success is poorly studied. The objective is to assess the impact of stress on the success of simulated NETI.

Methods: Crossover randomized controlled trial. Pediatric residents randomized to perform NETI in low (LS) or high stress (HS) environment, and then crossover. Stress was created using audio alarms, third party supervisors and simulated manikin instability. Stress of participants was assessed at rest, before and after each scenario. Stress assessment included: salivary cortisol, heart rate and the State Anxiety Inventory (STAI) questionnaire. Primary and secondary outcomes include: success rate, time to successful intubation and stress levels. Success rate was analyzed using chi2 and continuous variables were analyzed using paired t-test and repeated measures ANOVA.

Results: 49 residents (97 NETI) have been recruited and have completed the study. Success rate in the HS group was 60% vs 51% in LS (p=0.41). There was no significant difference with regards to duration of NETI, duration of scenario or salivary cortisol. Heart rate was significantly different between HS and LS groups (p<0.001). The STAI result was also significantly different between HS and LS groups (p=0.01).

Conclusions: Among stress markers, the heart rate and STAI increase significantly more in the HS setting. The stable cortisol level suggest that stress lived by the resident does not create a sense of loss of control or distress. These findings suggest that the HS setting is an appropriate training tool for stress preparedness for neonatal ETI.

LP12-8-60727

In Support of Meaningful Assessment and Feedback: A Study of Reasoning Tasks Used During Clinical Case Review in the Ambulatory Internal Medicine Clinic

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Background/Purpose: Most clinical teaching focuses on completing clinical tasks, such as history taking and physical exams. Less focus is placed on what we reason about (reasoning tasks) and how that helps us learn to be more effective clinicians. The purpose of this study is to explore how clinical reasoning tasks are used by learners versus attending physicians during case review in general internal medicine (GIM) clinics.

Methods: Data consists of 29 audio-recorded case review discussions, 21 new and 8 follow-up cases, between 7 attending internists and 13 trainees (medical students, residents, and fellows). A framework of 27 clinical reasoning tasks was previously developed and validated in the setting of clinical teaching unit admissions. Transcripts were analyzed using constant comparison and template analysis.

Results: Expertise effects were evident in the use of clinical reasoning tasks. Junior learners focussed on listing presenting complaints, whereas fellows and attending physicians would reprioritize complaints to identify the most salient issues for the encounter. Attending physicians and fellows were more likely to address how risk factors and comorbid conditions impact the presenting complaint, and reason around educational strategies for patients. Only attending physicians

considered documentation and follow-up strategies. Interestingly, goals of care and patient decision-making capacity were only addressed in 2/29 and 0/29 cases, respectively.

Conclusions: Clinical reasoning tasks provide a standardized vocabulary to communicate case-based reasoning during case review discussions. This can be a valuable way of understanding seniority-dependent differences in clinical reasoning and identify opportunities for quality improvement and competency-based education.

Teaching & Learning - General

LP13-01-59681

Quality maternity care? What do patients think?

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Background/Purpose: Family physicians (FP) are providing less low-risk obstetrics (LRO) care service across North America in recent years. Nevertheless, FPs offering LRO provide continuity of care which many pregnant women value, and FPs' clinical outcomes are similar to those of obstetricians. The objective of this project was to explore the perceptions of women who have received care from the Family Centered Maternity Care (FCMC) program.

Methods: As part of a complete program evaluation of the FCMC program, key informant interviews with women who received care from the FCMC team were carried out. Participants of the study were women who received care from the FCMC group from July 1, 2017 to June 30, 2018. Thirteen interviews were completed. A thematic analysis was completed on the qualitative data using the Framework Analysis Approach. The codebook was developed by two authors independently coding three initial interview transcripts and discussing to achieve consensus. The remaining transcripts were coded by the primary author, with any new codes or unclear passages being reviewed in duplicate to ensure consensus.

Results: Themes clustered around the overarching categories of FCMC qualities, services provided, continuity of care, patient satisfaction, and other services/providers. Overall, patients felt the FCMC provided a high level of support and encouragement that may not exist in other models of care. This occurred while maintaining

equivalent levels of perceived medical expertise and safety for low-risk pregnancies, deliveries, and newborn care.

Conclusions: Overall, women reported positive perceptions about the quality of care provided by the FCMC program. This project will eventually be integrated with other data sources as part of the entire FCMC program evaluation.

LP13-02-60334

Immersive virtual reality (iVR) improves procedural duration, task completion, and accuracy in surgical trainees: a systematic review

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Background/Purpose: With limitations on operating time for surgical trainees and concerns for patient safety, immersive virtual reality (iVR) has emerged as a portable, low-cost, high-fidelity addition to competency-based surgical education. This review explores current literature and effectiveness of iVR in surgical skills training.

Methods: A systematic search was performed on MEDLINE, EMBASE, CENTRAL, Web of Science and PsycInfo for primary studies published between January 1, 2000 and May 13, 2020. Two reviewers independently screened citations, extracted data, and assessed methodological quality using the Medical Education Research Study Quality Instrument (MERSQI).

Results: The literature search yielded 8,939 citations, with 13 articles included for qualitative synthesis. Ten studies (three pre-post, seven controlled trials) measured time to completion. iVR training improves post-intervention time to completion, with iVR completing procedures 18% to 43% faster than control groups. Two of four controlled trials that used task-specific checklists found iVR groups completed significantly more steps than control post-intervention. In one study, the iVR group scored 14 points higher on a 30-point checklist (p<0.001). Four studies reported on implant placement accuracy. In two studies by Xin et al., iVR groups placed significantly more successful grade I/A pedicle screws compared to controls (89.6% vs. 60.4%, and 69.6% vs. 55.4%). The mean MERSQI score was 11.88±1.60.

Conclusions: To our knowledge, studies on iVR have not been systematically reviewed in the context of surgical training. Given its efficacy, positive user ratings, and cost-

effectiveness, iVR has strong potential for widespread adoption into surgical training programs.

LP13-03-60526

Former les étudiants en médecine à la téléconsultation avec des patients simulés : de l'analyse des interactions à l'identification de modes de présentation du scénario de simulation

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Background/Purpose: L'essor de la télémédecine pose des défis au niveau de la formation des futurs médecins. Les téléconsultations simulées (TCS), impliquant des patients simulés (PS), sont une méthode de formation utilisée visant l'amélioration des compétences communicationnelles chez les étudiants en médecine. Or, les PS ont un rôle déterminant pour rendre la simulation aussi réaliste que possible. Notre objectif est d'examiner les interactions PS/étudiants lors de TCS afin d'identifier les modes de présentation du scénario par les PS.

Methods: Les données analysées comprennent un corpus de 74 enregistrements vidéo de TCS impliquant 13 PS et les transcriptions de 2 groupes de discussion avec 7 PS. Une analyse des interactions PS/étudiants a été effectuée à partir des enregistrements, et ensuite nous avons procédé à une analyse thématique des transcriptions de groupes de discussion.

Results: À partir de l'analyse des interactions, nous avons identifié deux modes de présentation du scénario par les PS : la présentation « jouée » reposant sur une forme de communication multimodale (langage, corps, intonation) et la présentation « narrée » reposant sur une mise en récit d'éléments contextuels du scénario. L'analyse des groupes de discussion a permis de révéler le besoin pour les PS d'adapter l'interprétation du scénario au contexte de TCS.

Conclusions: Les modes de présentation du scénario par les PS seront utilisés pour bonifier la rédaction des scénarios de simulation et pour développer une formation visant à permettre aux PS d'interpréter les scénarios dans un contexte d'enseignement de la télémédecine.

LP13-04-60544

Modules d'auto-apprentissage en dermatologie pour le cours Multisystèmes en médecine à l'Université de Montréal : Mise en place d'une nouvelle méthodologie d'apprentissage et impact sur les étudiants

Darosa Lim Université de Montréal, **Mélissa Nantel-Battista** Université de Montréal

Background/Purpose: L'enseignement de la dermatologie est limité en médecine préclinique bien qu'elle recoupe plusieurs spécialités médicales. Pour le cours Multisystèmes en médecine, des modules d'auto-apprentissage en dermatologie couvrant diverses maladies systémiques ont été conçus pour les étudiants utilisant la formation par concordance. Cette méthode pédagogique sollicite le raisonnement et l'organisation de l'information pour résoudre un problème. L'objectif est de faciliter l'intégration de la dermatologie tout en faisant des liens avec les autres cours. L'impact sur les étudiants a été évalué.

Summary of innovation: Seize modules ont été réalisés selon différentes maladies systémiques abordés dans le cours. Dans chaque module, une vignette clinique suscitant la réflexion est introduite, suivie de pistes d'action parmi desquelles l'étudiant doit prioriser. Il compare ensuite son raisonnement avec celui d'experts (dermatologue). Les informations cliniques relatives à la vignette sont ensuite présentées afin d'intégrer la matière d'un point de vue clinique, notamment via des diagnostics différentiels. Tous les étudiants ont rempli un sondage et un suivi sur leur performance à l'examen sommatif a été effectué.

Conclusions: Le sondage rempli par 276 étudiants a montré que les modules ont été appréciés (93% en accord) ainsi que la formation par concordance avec vignettes (83%). 91% ont rapporté que les modules permettent de faire des liens avec les autres cours. 89% se disent plus à l'aise de reconnaître les signes dermatologiques de maladies systémiques. 84% des étudiants ont complété les modules d'au moins 80%. La performance à l'examen sommatif en dermatologie a été de 84,2% (médiane). Ce projet démontre donc l'utilité et l'appréciation d'une telle méthode pédagogique.

LP13-05-60830

Assessment of Student Perceptions of the Importance of Embryology in a Medical Curriculum

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Background/Purpose: Basic science content hours have been reduced in medical school curricula over the years and it is therefore imperative that content covered be clinically relevant to students. The purpose of this study is to assess the student perspective of the importance of teaching and learning embryology in the medical curriculum.

Methods: At the end of first year, medical students at the University of Manitoba (n=65) completed a questionnaire containing likert scale and open-ended questions regarding the embryology curriculum at the University of Manitoba.

Results: The majority of students agree and strongly agree that embryology is an important part of medical training (53%, 20%) and helps to better understand clinical conditions (33%, 40%) especially those with future ambitions related to OBGYN specialties. Students ranked topics relating to heart development, nervous system development and eye development as most important to learn in the medical curriculum. Interestingly, when students ranked those same topics to clinical relevancy urogenital development and pregnancy joined those previously mentioned as most important. In open-ended questions, students discussed the need to highlight the clinical relevance of embryology more throughout the first year curriculum. Additionally, many students commented that since very little formal assessment related to embryology topics students put little effort into learning and understanding this information.

Conclusions: While students understand that the study of embryology is important, a void in the teaching clinical relevance and a need to develop more appropriate assessment strategies to promote learning of embryology topics has been identified.

LP13-06-60692

Récits de soi récits de soins: Nouvelles perspectives pédagogique et éthique

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Background/Purpose: L'enseignement de la communication et des enjeux éthiques dispensé aux étudiants reste un défi en éducation médicale. Depuis 2014, les étudiants de l'Université de Montréal produisent, dans le cadre d'ateliers d'éthique clinique, des vignettes portant sur des situations humaines complexes vécues pendant leur externat. Plus de 1500 vignettes écrites par les étudiants, ainsi qu'une trentaine de vignettes écrites par les patients partenaires coformateurs ont été le tremplin vers une initiative pédagogique.

Summary of innovation: Certaines vignettes marquantes ont retenu l'attention des coanimateurs et suscité intérêt et discussions. Les membres de la Direction collaboration et partenariat patient (DCPP), le Bureau de l'éthique clinique (BEC) de la faculté de médecine de l'Université de Montréal ainsi que des comédiens se sont réunis pour coconstruire avec les étudiants et les patients une soirée théâtre de mise en lecture de ces vignettes. L'importance des thèmes, l'impact émotif du contenu et la puissance pédagogique portés par ces vignettes ont mené l'équipe à vouloir mettre en lumière les éléments éthiques. Cette soirée a été présentée dans le cadre d'un colloque en pédagogie médicale (SIFEM) en mai 2019 à Montréal.

Conclusions: Plusieurs apprentissages découlent de ce processus de coconstruction à la fois pour les étudiants, les patients, les cliniciens enseignants et le public. Cette innovation pédagogique pourra inspirer d'autres programmes universitaires pour l'enseignement de l'éthique, de la communication et pour mieux naviguer dans les situations relationnelles complexes et à intégrer la réflexivité dans leurs pratiques professionnelles. Cette activité pédagogique sera reprise à l'Université de Montréal pour l'année 2020.

Teaching & Learning - Undergraduate

LP15-01-60315

Development of Netiquette (online etiquette) for resident academic half day

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Background/Purpose: The current pandemic has caused a rapid shift to "emergency" online teaching particularly in synchronous (webinar) environments, with limited preparation of teachers and learners. Face to face learning rules are typically well established from an early age, but in online learning are not quite so clear. Establishing netiquette, or online learning rules such as webcam usage and communication methods, can be limited by lack of time, lack of knowledge, privacy, accessibility and inclusivity considerations, many of which can be mediated by facilitated discussion, consensus building and collaborative/creative solutions.

Summary of innovation: Rooted in Garrison's community of inquiry framework, this initiative outlines an approach that can be considered when developing netiquette amongst a learner group that is meeting frequently over time. Learners (in this case medical residents) were presented with netiquette considerations, followed by discussion, online voting, and development of a moderator guide for working with invited speakers. 69% of residents felt that a reasonable percentage of face-time (i.e. webcam on) to strive for during synchronous teaching sessions was greater than 50% of the allotted time. 62% agreed to use non-verbal feedback to identify their status. 69% felt that an ideal virtual break was 10 minutes. Polling questions and breakout rooms were the preferred methods of utilizing interactivity to maintain engagement.

Conclusions: This approach and associated resources may be helpful in establishing netiquette for learner groups transitioning to online environments, particularly in a PGME context. References 1. Watermeyer et al. Higher Education. Jun 2020. 2. Garrison et al. Internet and Higher Education 13 (2010) 5-9 3. D'Alesandro, M. Nurse Educator. 45 (5):243-247.

LP15 - 02-60480

Think, pair-up, predict, justify, and now, practice: Using the Student-Generated Reasoning Tool (SGRT) to generate a bank of practice problems

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Background/Purpose: Cognitive biases are largely responsible for medical error and educational tools that help guide students' critical thinking are limited. Using the Student-Generated Reasoning Tool (SGRT) - a semi-structured approach to guiding medical students' critical thinking - objectives of this study were to determine the feasibility of students using SGRT to create practice problems and to compare the impact of individual vs. teamwork with SGRT.

Methods: A proof-of-concept randomized controlled trial (RCT) was conducted in Fall-2019 on second-year medical students at Université de Montréal. Group-A (n=8) generated SGRT practice problems and practiced with them; Group-B (n=4) practiced with SGRT problems generated by Group-A. We compared individual vs. team responses to SGRT, administered surveys and conducted interviews.

Results: Group-A students generated 12 practice problems that both Group-A and B successfully used for practice, within allotted time. In Group-A, teams suggested a greater variety of diagnostic hypotheses and predicted more findings compared to individuals. Students' perceived usefulness was higher in Group A vs. B (mean= 4.5±0.3 vs. 3.5±0.3, P=0.02). Thematic content analysis revealed that students used numerous critical thinking skills (n=6) when using SGRT.

Conclusions: Building on the learning science of team-based learning and retrieval practice, this study offers a feasible approach for students to collaboratively generate a bank of practice problems using the SGRT, while making use of multiple critical thinking skills. Ultimately, this study justifies a larger-scale RCT comparing students who use the SGRT to generate and practice to those that only practice, isolating the relative impact of generation on learning.

LP15 - 03-60652

Features of effective social media in undergraduate medicaleducation: A systematic review

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Background/Purpose: There are over 3.81 billion worldwide active social media (SoMe) users. SoMe is ubiquitous in medical education, with roles in professionalism, blended learning, well-being and mentoring. Previous reviews took place before surges in popularity and revealed a paucity of quality empirical studies assessing efficacy. This review aimed to synthesise evidence regarding SoMe interventions in undergraduate medical education, identifying features associated with positive & negative outcomes.

Methods: We searched 31 key terms through 7 databases, as well as references, citation & hand searching. We included studies describing interventions and research on exposure to existing SoMe. Title, abstract and full paper screening were undertaken independently by two reviewers. Papers were assessed for quality using the Medical Education Research Study Quality Instrument (MERSQI) and/or the Standards for Reporting Qualitative Research (SRQR) instrument. Extracted data were synthesised using narrative synthesis.

Results: 112 studies met criteria. Methodological quality had not improved since 2013. Engagement and satisfaction with SoMe platforms were described, with hierarchy flattening & improved communication with educators detailed. SoMe use was associated with objectively & subjectively improved performance, however evidence for long term knowledge retention was limited. SoMe was linked to adverse impacts on mental & physical health. Professionalism was heavily investigated & considered important, though negative correlation between SoMe use & professionalism may exist.

Conclusions: SoMe is enjoyable, may improve short term knowledge retention & can aid communication between learners and educators. However, long-term, high-quality study is required to investigate professionalism concerns & potential harms.

LP15 - 04 - 59495

Near Peer Tutoring in Medical Anatomy Education: A Pilot Study

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Background/Purpose: Near-peer teaching has emerged in the anatomy education literature as a model for having senior students serving as tutors to junior students. This approach has yet to see widespread use and integration in undergraduate medical education. We launched a pilot study involving Year 2 (Y2) medical students acting as near-peer tutors (NPTs) in Year 1 (Y1) anatomy labs. We evaluated the impact on Y1 learners and Y2 NPTs.

Methods: Y2 medical students at our local institution were invited to act as NPTs in Y1 neuro- and gross anatomy labs. Six NPTs participated in nine labs for 31 Y1 medical students. Lab content ranged from dissection and overview of gross specimens, neuroanatomy micrograph review, and clinical case discussion. NPTs performed select demonstrations; assisted in dissections; answered questions; and taught clinical cases. Post-lab, NPTs were surveyed on their experience. At the end of term, Y1 learners were surveyed regarding their experience with NPTs.

Results: NPTs self-reported increased comfort with regards to teaching. In preparation, this opportunity allowed NPTs to review previously learned material, and the majority derived simplified approach for learners and/or were able to anticipate potential questions. Y1 learners felt NPTs were able to identify knowledge gaps, present information in a student focused manner, and overall enjoyed the inter-year collaboration and collegiality. Faculty interviews also revealed that having NPTs did not significantly increase their lab preparation, set-up and workload.

Conclusions: This initial pilot yielded promising results. NPTs have the potential to positively impact multiple stakeholders (Y1 and Y2 learners as well as faculty) in the context of medical anatomy education. Future work will investigate impacts of this educational strategy on participants' knowledge retention and for medical students without prior anatomy knowledge.

LP15 - 05 - 60223

The Early Introduction of Ultrasound in Undergraduate Medicine

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Background/Purpose: At UBC, we have updated our ultrasound curriculum over the past two years to include an innovative early introduction to ultrasound program. We have implemented strategies to deal with challenges in uptake and faculty recruitment across our main campus in Vancouver and distributed medical education (DME) sites.

Summary of innovation: The ultrasound curriculum at UBC has expanded over the past 2 years, driven by the literature that demonstrates the importance of early exposure alongside a desire from learners. Recently, recommendations from the Canadian Ultrasound Consensus for Undergraduate Medical Education Group have described the growing importance of this curriculum. At UBC, our current curricular suite includes 6 ultrasound sessions and 2 ultrasound lectures. The expansion has included the addition of introductory abdominal, cardiac, and volume assessment sessions. These sessions occur during the first year, in the first term of our Clinical Skills program using hypothesis-driven technique as an extension of the physical exam. This was born from a desire to increase the overall number of scanning opportunities from 3 to 6, to increase exposure and comfort point of care ultrasound (POCUS). Student and faculty feedback was extremely useful in fine-tuning these sessions. Additional teaching support was obtained through faculty development sessions that were run at each of our DME sites. This consisted of an expert-facilitated session with an opportunity to provide an ultrasound curriculum refresher for faculty as well as ongoing mentorship. Recruitment for the next semester's teaching sessions was completed in record time.

Results: Students now have 6 different opportunities to scan during their preclinical years with future plans to have learners acquire images independently. Tutor recruitment is complete months in advance with high quality tutors. These interventions will better prepare our students to scan in clerkship and residency.

LP15 - 06-60324

The Big Bang: Developing a Virtual Subarachnoid Hemorrhage Simulation for Preclinical Medical Students

Katie Harris Memorial – University of Newfoundland, **Gillian Sheppard** Memorial – University of Newfoundland

Background/Purpose: Simulation-based learning is important for rare, high mortality cases which are unlikely to be witnessed during clinical rotations but are likely to be encountered in during future practice, such a subarachnoid hemorrhage. However, neurology case simulations, especially those targeted at preclinical learners, are underrepresented in simulation pedagogy. We designed and are planning to test a virtual simulation of subarachnoid hemorrhage for preclinical medical students. We seek to answer the question: can we enhance the delivery of neurology curriculum for preclinical medical students using virtual simulation of a subarachnoid hemorrhage?

Summary of innovation: We successfully designed a virtual simulation which is 15 minutes long, and requires only one standardized patient and one confederate, which makes this simulation accessible to institutions with limited simulation resources. We developed pre- and post- simulation surveys to collect quantitative (Likert scale) and qualitative (open-ended response) data on self-assessed confidence in neurology history taking, virtual physical exam and ability to generate a differential diagnosis. The questions from the pre- and post-simulation surveys can be analyzed to detect changes in the students' level of confidence post-simulation.

Conclusions: The development of an accessible subarachnoid hemorrhage simulation for preclinical medical learning partially addresses the educational need to create additional accessible neurology training tools for preclinical students, especially during restricted access to clinical experiences due to COVID-19. Student feedback on this simulation will be collected in Winter 2021. Analysis of student experiences will build upon the existing literature surrounding the efficacy of simulation as a training tool.

LP16 - 01-60533

Do "Teddy Bear Hospital Project School Visits" improve pre-clerkship students' comfort communicating medical topics to children?

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Background/Purpose: The Teddy Bear Hospital Project (TBHP) is an international initiative aimed at reducing children's fears associated with healthcare visits by modeling these interactions using teddy bears. uOttawa's program has outlined an additional objective: increasing pre-clerkship medical students' comfort communicating medical topics to children. A preliminary analysis involving only post-visit surveys suggested that this objective was being met. However, this study aimed to assess for a significant change in comfort communicating medical concepts to children using pre- and post- visit surveys.

Methods: Pre-clerkship volunteers (n=36) participated in 24 kindergarten/grade one classroom visits from September 2019-March 2020. Visits consisted of four stations (Handwashing/Immunizations; X-ray/MRI; Well-Child; and Casting/Bone Health). Likert scale data from pre- and post-visit surveys were analyzed using paired t-tests.

Results: 86.11% (31/36) of volunteers were included in our study. There was a statistically significant increase in volunteers' self-reported comfort communicating medical topics to young children (Pre-Mean=6.96, SD = 1.51; Post-Mean=7.62, SD=1.1; p=0.01). However, there was no statistically significant difference in volunteers' reported interest in pursuing a career with a pediatric-focus (Pre-Mean=8.00, SD=1.54; Post-Mean=7.7, SD=1.96; p=0.24). 100% (36/36) of volunteers reported that they would recommend TBHP to a colleague interested in pursuing family medicine or pediatrics.

Conclusions: Our study suggests that TBHP met its objective of increasing medical students' self-perceived comfort in communicating medical topics to children. Our study is limited by small sample size and a possible ceiling effect. In future studies, we aim to further explore the longitudinal effects that TBHP pre-clerkship participation has on students' comfort throughout their clerkship pediatric rotation.

LP16-02-60634

Simulated Patient Encounters: An Online Medical Education Tool to Train Clinical Reasoning Skills

Mark Grinberg McMaster University, **Maxwell Ng** McMaster University, **He Tian Chen** McMaster University

Background/Purpose: Developing clinical reasoning and decision-making is a key objective of medical education. However, this skill set is generally not formally taught nor assessed in pre-clerkship undergraduate medical curricula. Furthermore, the virtualization of clerkship due to COVID-19 has further limited students' direct exposure to clinical patient care. These present a gap in the medical curriculum where students lack practical experience in navigating knowledge gathering and decision-making in the clinical setting.

Summary of innovation: We have developed an online tool that simulates a virtual clinical visit and a hospital EMR, where students are presented with a patient and chief complaint. Students autonomously gather history, select and interpret physical exams and investigations, generate a list of differential diagnoses, decide upon a final diagnosis, and propose a management plan, at their own pace. Each patient is procedurally generated to enable a large repertoire of cases with varying presentations that mimic a realistic patient population. On completing the case, the student is provided automated feedback on the pertinent aspects of the case. This learning model complements traditional medical teaching by encouraging application of the student's accrued knowledge beyond rote memorization, as well as developing intuition about patient variation and the diagnostic utility of different findings.

Conclusions: We have developed a novel tool for self-directed learning of clinical reasoning skills. We collected qualitative feedback from medical students and faculty members to inform its development and evaluate its usefulness. This demonstrates the feasibility of computerized simulations as a tool for enhancing medical education.

LP16-03-60663

Seeing Colour: Representation of skin tones in dermatological manifestations of illness in medical education

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Background/Purpose: Patients with skin of colour experience worse health outcomes and receive poorer quality of care within the healthcare system. There are pervasive inequities entrenched within medical education which influence these discrepancies. Understanding how components of medical education contribute to inequities is essential to address racial biases in healthcare at their source. This study explored the role of didactic teaching of skin manifestations of illness in perpetuating this disparity in a Canadian context.

Methods: The authors reviewed 980 images across 643 lectures spanning 15 courses throughout two years of preclinical curriculum from September 2018 to May 2020 at a Canadian medical school. Images were categorized according to the Fitzpatrick Scale: Light Tone (LT), Medium/Dark Tone (MDT), and Unclear Tone (UT). The average number of LT and MDT images per lecture was then compared within each core medical course, as well as across the pre-clerkship curriculum in total using paired two-tailed t-tests.

Results: The overall proportions of LT and MDT images were 81.9% and 10.8%, respectively. Comparing the average number of images in the LT and MDT categories per lecture, LT images (1.25) were significantly more abundant than MDT images (0.16) in an overall curricular analysis (p=1.78 E-09). This difference was also observed within the Skin course (LT = 23.4; MDT = 3.4; p = 0.0004).

Conclusions: The disproportionate amount of light skin images in preclinical medical education reproduces inequities and contributes to racial disparity. Medical educators must recognize and address how illness is depicted for diverse patient populations in order to advance equity.

LP16-04-60750

Bridging the gap in clinical skills: A pilot study investigating the use of respiratory clinical examination skills in practice.

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Background/Purpose: There is a paucity of literature that explores whether students use the clinical skills learned during medical school in practice. This study aims to fill this gap, as a greater understanding of clinically relevant examination skills may better focus studying, increase clinical competence, and ease student anxiety.

Methods: We disseminated a 10-minute online anonymized survey to residents and physicians using an open recruitment strategy with convenience and snowball sampling. This survey sought to determine the practical

use of respiratory examination skills in the McMaster Clinical Skills guide. We conducted basic quantitative analysis and descriptive content analysis to evaluate results.

Results: From a total of 161 respondents, 148 completed the entire survey. The majority of respondents found all 12 inspection skills to be useful in practice. Tracheal deviation was the only palpation skill found useful (68.63%). No percussion or auscultation skills were seen as useful by a majority, except for auscultating for breath sounds (100% useful). In qualitative analysis, the major theme was that skills should be taught despite minimal use as they help teach disease pathophysiology, help in limited resource settings, and have usefulness in particular situations (e.g., traumas or different specialties).

Conclusions: There is a discrepancy between the clinical skills taught to students and the ones actually used in practice. Despite this, there is still utility in teaching these skills to medical students. Rather than removing skills from the curriculum, a better avenue would be to emphasize maneuvers that are clinically important to help guide preparation for clinical settings.

LP16-05-60767

MedExpo: A Novel Teaching Tool for Short and Long-Term Retention of Medical Concepts

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Background/Purpose: Currently, few outreach programs have been developed to evaluate high school student competency and familiarity with medical education. In response, we have created a high school outreach program called MedExpo, which provides invaluable teaching experience to medical students while providing high school learners with novel interactive learning experiences in point-of-care ultrasound (PoCUS), vital sign assessment, and cadaveric anatomy. We have set out to determine whether MedExpo is a valuable educational tool for high school students and if the program yields long-term knowledge retention.

Summary of innovation: During each session, medical students teach workshops to high school students in the areas described above. To determine whether our workshops resulted in knowledge retention, we surveyed the participants at three time points (pre-, post-, and three-months post-session). Overall, 218 high school students participated, and completed identical pre-

session (n=218), post-session (n=218), and three months post-session (n=116) quizzes. Average post-session scores (82%) were significantly higher than average pre-session scores (58%) (p<0.001). Average three-month post session scores (67%) were also higher compared to pre-session scores (p<0.001). A one-way ANOVA analysis on the overall scores as well as the individual sections in the quiz were calculated, all showing statistical significance.

Conclusions: Based on our initial data, we conclude that MedExpo is a tool that positively modulates student knowledge well beyond the outreach sessions themselves, resulting in long-term retention. This suggests that incorporating formative assessments in science outreach programs can be extremely valuable to both participants and educators.

LP16-06-60843

Clerkship students as teachers: The role for a student-led bedside teaching program in medical school

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Background/Purpose: The ability to teach effectively is an essential skill for physicians; however, medical students may not receive sufficient opportunity to develop this skill during medical school. In this study, we sought to investigate the perceptions and potential benefits of clerkship students engaging in an innovative peer-assisted bedside teaching (PABT) program.

Summary of innovation: Over a three-year period, clerkship students on their Internal Medicine block at uOttawa were recruited to conduct a bedside teaching session for pre-clerkship students. Tutors taught two 60-minute small group sessions based on their choice of patient admitted to the Internal Medicine ward. Each session was organized to have a traditional teaching component, a bedside teaching component, and a debriefing component. After the session, tutors and students completed a feedback questionnaire.

Conclusions: 32 clerkship students and 117 pre-clerkship students completed an evaluation of the program. 94% of tutors felt that they improved their teaching skills and 84% felt they had increased levels of confidence in their teaching abilities after their session. Only 34% of tutors reported that they had many other opportunities to teach during medical school. 94% of pre-clerkship students found the sessions reinforced the clinical skills they had learned in medical school, with 79% and 77% feeling more comfortable taking a history and physical exam

respectively. Our study found that PABT is an effective method for fostering teaching skill and confidence among clerkship students, with the additional benefit of reinforcing clinical skills taught to pre-clerkship students. PABT may have potential to meet the demand for teaching opportunities in UGME.

LP16-07-60844

How two books published by a student committee help students prepare for practical exams

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Background/Purpose: It is a well-known fact that medical students often trade their textbooks for alternative tools such as summaries, charts and diagrams when preparing for exams like the OSCEs. They seek structure and clarity across the large amount of information they need to assimilate.

Summary of innovation: With that in mind, the Groupe de perfectionnement des habiletés cliniques (GPHC) at Université Laval (UL) published, in 2013, the 1st edition of the Petit guide des habiletés cliniques (PGHC) and, in 2016, the 1st edition of the Petit guide de l'entrevue médicale (PGEM). The PGHC, a reference book developed and reviewed by more than 200 students and 40 physicians from various specialties, focuses mainly on the physical exam findings for 215 pathologies classified by system. It was renewed in 2018 with a 2nd edition. The PGEM, which addresses the medical interview and its related skills, is currently being reedited to be more consistent with the PGHC presentation.

Conclusions: The second edition of the PGHC sold more than 1,400 copies across several francophone universities in the province of Quebec, and both the PGEM and the PGHC are available in select bookstores. In a recent limited survey conducted among UL students, 98% of the responders stated that they used the books at least once to prepare for a practical exam. The GPHC is always looking for recommendations and therefore opportunities to improve their books. The creation of such a network within the medical education community promotes knowledge and student collaboration with their peers and teachers, for purposes of teaching and learning innovation.

Learning Outcomes

LP17-01-60257

Impact of the mini-schools of health on future healthcare professionals' attitudes toward indigenous people

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Background/Purpose: Université de Montréal organizes Mini-Schools (MS), during which voluntary undergraduates of health sciences visit indigenous youth and exchange about health topics. Undergraduates take part to a pre-departure training one week before the MS. The MS last one day (Wemotaci) or one week (Côte-Nord). This study aims to assess the impact of these activities on undergraduates' prejudices toward indigenous people.

Methods: Undergraduates completed the Old-fashioned and the Modern Prejudiced Attitudes Toward Aboriginals Scale (O-PATAS and M-PATAS) before the training (baseline), after the training (T1) and after the MS (T2). Scores were compared using repeated measures ANOVA.

Results: Among the 70 participants, 49 filled the questionnaire at baseline, T1 and T2 (70% participation rate). They were from 11 health & social sciences programs, 77.6% were women, mean age was 21.8, 36.7% were in medicine, 24.5% in nursing. There was a significant reduction of prejudices as measured by the O-PATAS (Baseline 23.1 ± 5.9, vs. T1 22.4 ± 5.5 vs. T2 18.9 ± 5.6; Intervention effect : $F_{(2, 96)} = 12.4$, $p < 0.001$). The reduction was significant at T2 ($F_{(1,48)} = 12.7$ p=0.001), but not at T1 ($F_{(1,48)} = 0.7$ p=0.4). Likewise, there was a reduction of prejudices as measured by the M-PATAS (Baseline 23.2 ± 6.0, vs. T1 23.6 ± 6.2 vs. T2 21.1 ± 5.5; Intervention effect : $F_{(2,96)} = 5.3$, p =0.009). The reduction was significant at T2 ($F_{(1,48)} = 7.9$ p=0.007), but not at T1 ($F_{(1,48)} = 0.5$ p=0.5).

Conclusions: In a group of voluntary undergraduates in health and social sciences, opportunity for exchange with indigenous communities, but not theoretical teaching, appears to reduce prejudices. Maintenance of such changes over time remains to be eluded.

LP17-02-60759

Evaluating residency match outcomes of MD+ programs: a Canada-wide survey

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Background/Purpose: MD+ training programs are designed to equip trainees with the knowledge and skills necessary to pursue a clinician-scientist career pathway, and following their completion, the next step in training is typically postgraduate medical education. Examining outcomes of MD+ trainees in the residency match is crucial to determining the effectiveness of MD+ training programs in producing clinician-scientists.

Methods: We conducted a survey of graduates of MD+ programs in Canada from 2016-2020. The survey consisted of 17 questions targeted towards participation and performance in the residency match process. All questions were optional and data were collected through an anonymous online Google Forms document. The survey was open for completion from October 2019-September 2020.

Results: We received 17 unique responses. 100% of respondents participated in the Canadian Resident Matching Service (CaRMS) match. Most participants (29.4%) completed their training program and entered the match in 2017. No respondents indicated that they entered American residency match processes. 88.2% of respondents matched to a postgraduate training program in the first iteration of the CaRMS match and an equivalent number to their top choice discipline. Notably, only 64.7% matched to their top choice program. Only 43.8% of respondents indicated they intended to pursue a career as a clinician-scientist upon completion of their training.

Conclusions: Residency match outcomes of MD+ graduates are largely positive, however, there remains a large disparity between the number of graduates and the number intending to pursue research-focused careers. Our work has important implications for advocacy, curriculum design, and mentorship within MD+ programs.

LP17-03-60565

Turning out well-rounded oncologists: Are our residency learning outcomes up to the task?

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Background/Purpose: Successful implementation of Competency-Based Medical Education in residency training relies on well-defined and holistic learning objectives. The purpose of our study was to ascertain whether our oncology residency programs' learning objectives reflect a comprehensive spread of competencies according to established learning taxonomies, and to evaluate their quality.

Methods: All 1117 learning objectives from the Medical Oncology and Radiation Oncology residency programs at Western University were evaluated based on the SMART rubric (Specific, Measurable, Attainable, Realistic, Timely). Bloom's Taxonomy was used to map learning domains. Objectives' clinical competency domains were categorized according to Fink's Taxonomy and CanMEDS.

Results: Thirty-six percent of the objectives met all SMART criteria. Sixty-eight percent of objectives targeted recall and understanding in Bloom's cognitive domain while 66% of objectives targeted receiving and responding in the affective domain. All CanMEDS roles were represented within 1117 objectives with 68% focused on Medical Expert. Using Fink's taxonomy, 70% of objectives targeted Foundational knowledge, 24% Application, 20% Integration, 18% Human dimension, 5% Learning to learn, and 2 % Caring.

Conclusions: Existing oncology objectives emphasize CanMEDS medical expert competency, achieved through lower levels of Bloom's cognitive domains. Using Fink's as an alternative framework, a relative underrepresentation of learning outcomes of Integration, Human dimension, Caring and Learning to Learn becomes evident. These findings will inform faculty dialogue about revision of objectives using CanMEDS and other frameworks, to ensure that learning outcomes target the broad spectrum of competencies required of clinical oncologists.

LP17-04-60691

Identifying Gaps in Critical Appraisal Skills development in Undergraduate Medical Education: A Needs Assessment Survey

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Background/Purpose: Critical appraisal skills are essential for the provision of high-quality evidence-based patient care. The learning needs of medical students must be better understood in order to provide an education that will ensure successful acquisition of medical literature critical appraisal skills. The objective of this study was to 1) understand medical students' current medical literature critical appraisal skill and 2) determine medical students' education needs to help establish a foundation for the acquisition of these skills.

Methods: An online survey was distributed to medical students at the University of Ottawa over a 2-month period. The survey collected background and demographic information, as well as educational experiences, learning preferences, and general opinions on medical literature critical appraisal.

Results: Fifty-nine students completed the survey. Thirty-four (57%) and forty-four (75%) of respondents reported that they were lacking both competence and confidence in critical appraisal, respectively. Lectures and seminars were identified as the most common content delivery methods for teaching critical appraisal skills while, journal club, case-based learning and journal articles were perceived as being the most effective content delivery methods.

Conclusions: The majority of students recognize the value of critical appraisal but report lacking competence and/or confidence to apply these skills in clinical practice. Interestingly, our survey identified a discrepancy between students' preferred content delivery methods, and the ones thought to be most effective for the teaching of medical literature critical appraisal. This shortcoming in teaching evidence-based medicine may contribute to the difficulties encountered by medical students in the application of their critical appraisal skills.

LP17-05-60655

A Flipped Classroom Approach to Teaching Medical Students a Clinical Approach to Precocious and Delayed Puberty

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Background/Purpose: Although 'flipped classroom' educational approaches have shown promise, there has been relatively little formal investigation of their effectiveness in the pediatric context. We investigated the effectiveness of an online interactive module to supplement a clinical case-laden education session, compared with a traditional didactic format in teaching medical students a clinical approach to children presenting with early or late puberty.

Methods: 127 third and fourth-year clinical clerks at an Ontario medical school participated during their core pediatrics rotation. The control group (n=60) read a review article and then attended a traditional didactic session. The experimental group (n=67) completed an online interactive module before attending an interactive clinical case-based learning session about children with early or delayed puberty. Both groups completed 3 validated knowledge tests: a pre-test, a post-test, and a 3-month post-test. ANOVAs were run to detect differences between the 3 times and different conditions.

Results: ANOVAs showed no significant differences between the pre and post-conditions. However, the flipped classroom condition had a significantly higher aggregate score (F=20.29; df=1, 98; p>0.0001; d=0.92; large effect size) at the 3-month post-test time (m=8.41) than the control group (m=7.47). This corresponds to a large effect-size.

Conclusions: Our findings suggest that a flipped-classroom approach, although initially statistically indistinguishable in knowledge retention from the didactic control group, in the long term yields a higher level of knowledge retention and enduring learning. We propose that a flipped classroom therefore be considered for more types of learning situations where enduring learning is the goal of instruction.

LP17-06-60509

Spiralling Family Medicine Clerkship Curriculum to Enhance Learning using Both Asynchronous and Synchronous Modalities

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Background/Purpose: The COMPASS curriculum was initiated at the McMaster DeGroote School of Medicine in 2006 with the tenets: concept-oriented, multidisciplinary, problem-based, practice for transfer, simulations in clerkship, and streaming. The practice to transfer component concerns the ability to transfer previous knowledge, applying it in a different context which is central in this innovative curricular project. The Family Medicine clerkship program developed a new E-learning platform by revisiting pre-clerkship Problem-based learning cases, adding layers of complexity to foster clinical knowledge translation in clerkship during which the cases are completed asynchronously and in synchronous tutorials.

Summary of innovation: Building on the foundation of curriculum development strategies and influence of adult learning theory, a Family Medicine integrated curriculum was designed by modifying preclerkship cases to have a practice to transfer focus. Students prepare for tutorial using the new E-learning modular platform. The modules integrate preclerkship and clerkship curriculum, including knowledge-check questions to promote self-assessment. The repetition of formative assessment aims to promote learner self-assessment and preparedness for the clinical decision making focused exit examination. The "super-tutorials" were designed to enhance interaction between clerks and a maestro (content expert), and the E-learning platform to enhance student engagement using polling questions and interactive features.

Conclusions: The development of asynchronous learning modules and synchronous learning opportunities through maestro-led "super-tutorials" allows for students to recall previous knowledge concepts and apply them in more complex situations thereby facilitating knowledge transfer. The maestro challenges this knowledge by guiding students through novel scenarios, which further develops knowledge transfer, and prepares students for diverse clinical scenarios.

Pot Pourri

LP18-01-60602

Development and Implementation of a Novel Pre-clerkship Leadership Program

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Background/Purpose: CanMEDS was updated in 2015 with the change from Manager to the Leader role. Leadership is intrinsic to medicine. Poor communication skills, leadership and professionalism have been linked to poor patient outcomes, patient dissatisfaction, complaints and medico-legal claims. Student feedback suggests current Undergraduate Medical Education (UGME) leadership training is insufficient. Currently, the uOttawa MD program provides didactic lectures based on the LEADS framework. However, we believe there is the potential to enhance students' engagement through experiential learning.

Summary of innovation: The Foundations in Leadership program represents a yearlong curriculum (8 sessions, 15 hours total) which emphasises experiential learning through self-learning, small group exercises, formative evaluations, and role-play. Main topics covered include: personal reflection and feedback solicitation, conflict resolution, negotiation, influencing others, and leadership in medicine. The course content incorporates objectives from the CanMEDS and LEADS competency frameworks linked to entrustable professional activities embedded within the AFMC. Participants will be assessed prior to, during and after program completion through various measures including: self-reported skills assessments, knowledge retention tests, program satisfaction and formative OSCE scenarios.

Conclusions: By providing rigorous leadership training early in their education, medical students may become better suited to manage difficult situations and navigate team dynamics in future clinical settings. Next steps include program evaluation to help inform meaningful institutional changes to the leadership curriculum within the uOttawa UGME program.

LP18-02-60744

Recruitment of Healthcare Students to Rural Areas: Interests and Perceived Barriers

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Background/Purpose: The Healthcare Travelling Roadshow (HCTRS) aims to increase recruitment of

healthcare providers (HCP) to rural BC communities by introducing healthcare students (HCS) to rural areas. In this study, HCS' interests, or attracting factors, and perceived barriers on rural practice were sought and compared to literature on practicing HCP' views. This examination will allow for targeted recruitment strategies.

Methods: Ninety-five HCS from a variety of healthcare disciplines in BC applied to the 2019 HCTRS; the top 36 were selected and 30 participated. Participants were invited to complete an online survey after their HCTRS trip, and 11 participants responded. Qualitative responses to open-ended questions regarding interests and perceived barriers were coded thematically to categories, which were then grouped to main themes.

Results: HCS' reported interests and barriers fit into two main themes: lifestyle factors and career factors. Regarding attractions to rural practice, lifestyle factors were reported more frequently than career factors, but they were reported with approximately equal frequency with respect to barriers. Participants reported that the HCTRS increased awareness of rural healthcare needs, accuracy of perceptions, and interprofessional collaboration.

Conclusions: This study demonstrates that rural recruitment initiatives must consider both career stage and healthcare discipline. This study supports fostering interest in rural practice through exposure to rural communities, and suggests that community engagement beyond clinical involvement should also be considered.

LP18-03-60335
Voisins de la rue

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Background/Purpose: L'incohérence entre la demande de soins de santé de la population vulnérable et l'accès offert par la communauté médicale est inconcevable. Pour les étudiants, la création de liens avec cette clientèle est confrontante. Les préjugés peuvent nuire à la qualité de la relation, alors que cette dernière est essentielle à une démarche de soins efficace et inclusive. L'initiative étudiante « Voisins de la rue » offre l'opportunité d'aborder la réalité complexe des populations vulnérables dans un contexte sécurisant et encadré. Non seulement ce projet permet de valoriser la responsabilité sociale du

futur médecin; mais il contribue à développer l'autonomie et l'estime personnelle chez les personnes marginalisées de Trois-Rivières, étant l'une des dix villes les plus pauvres au Québec.

Summary of innovation: En septembre 2017, trois étudiantes de l'UdeM au campus décentralisé de la Mauricie ont d'abord collaboré avec les intervenants d'organismes communautaires locaux. Ensemble, ils ont identifié les besoins des usagers et créé des activités rejoignant des objectifs variés : art, cuisine, musique, relaxation et jeux. Annuellement, chacune des 7 activités, où la communication est priorisée, permet d'établir des liens significatifs entre 5 à 8 étudiants et un même nombre de participants marginalisés. De plus, une collecte de dons est effectuée à chaque Noël pour les gens en situation d'urgence. À ce jour, 20% des étudiants entre l'année préparatoire et la fin de l'externat ont participés.

Conclusions: Au quotidien, les étudiants sont sensibilisés à la réalité des personnes vulnérables et peuvent adopter une approche médicale personnalisée et collaborative. En diffusant cette initiative au Canada, l'importance d'un accès aux soins égal pour tous sera mis de l'avant.

LP18-04-59955
Canadians with unmet healthcare needs: Who are they?

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Background/Purpose: Despite Canada's universal healthcare system, its citizens do not have equitable access to healthcare. This study aims to create a profile of individuals within Canada that have reduced self-reported healthcare access compared to the overall population and aims to highlight current gaps in the national healthcare framework.

Methods: Data from the Statistics Canada Canadian Community Health Survey (CCHS) 2014 were analyzed to determine the proportion of Canadians who report unmet healthcare needs, what services were unavailable, and why they were unable to access healthcare services. Further, the data were analyzed to determine whether there is variation in unmet healthcare needs based on respondents' sociodemographic characteristics.

Results: 10.9% of CCHS 2014 respondents reported having unmet healthcare needs. Younger respondents, female respondents, individuals with poor health status, respondents without a regular medical doctor, recent immigrants, and individuals with low income were most likely to report having unmet healthcare needs.

Respondents in the territories were most likely to report having unmet healthcare needs. Wait times, lack of healthcare service availability when the service was required, and lack of healthcare service availability in the respondent's area were reported as the greatest contributing factors to having unmet healthcare needs.

Conclusions: Limited access to healthcare experienced by various subpopulations within Canada highlights the need for the identification of marginalized individuals whose health may benefit from improved access to healthcare. With this knowledge, steps can be taken within the healthcare system and government in order to improve healthcare access and promote health equity across Canada.

LP18-05-59711

Residents as research subjects : balancing resident education with contribution to advancing educational innovations.

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Background/Purpose: Research in education is essential to advance knowledge as well as to improve learning. Medical residents can be solicited as subjects for studies, however no literature defines how to protect their rights as participants and to limit the impact of their participation on their clinical training.

Methods: Through a nominal group technique (NGT) approach, a group of 8 experts in Pediatrics at Université de Montréal, (clinical educators, education researchers, residents and IRB president) developed recommendations to guide how the inclusion of residents as subjects in medical education research can take place with the dual goal of protecting residents' rights while also promoting contribution of researchers' work to medical education literature.

Results: Five issues and recommendations were described. 1) Freedom of participation: participation or non- participation, or withdrawal from a study should not interfere with teacher-learner relationship (recommendations on procedures for recruitment and content of consent form) ; 2) Over-solicitation of residents (recommendations on the process of limiting the number of ongoing studies); 3) Management of time dedicated to participation to research (recommendations on schedule and proportion of time for study participation); 4)

Educational security: data collected during a study should not influence clinical assessment of the resident (recommendations on the role of the researcher as a clinical supervisor); and 5) Emotional security of the learner (recommendation on the requirement for debriefing during simulation-based studies).

Conclusions: This guide is an essential tool to insure respect of resident rights and completion of a robust training program but also to support high quality research in education that will enrich medical education literature.

LP18-06-59950

A modern approach to physician resource planning to improve access to health care for Canadians

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Background/Purpose: The Canadian health system is vulnerable to disruption by advances in technology, differing work expectations from incoming physicians, and increasing patient involvement. To ensure the provision of accessible and equitable health care services to Canadians, physician resource planning (PRP) will be fundamental. PRP is defined as ensuring the right mix, distribution, and number of physicians needed by society. Currently, each province follows a different approach as there is no official national oversight. This results in provincial authorities collecting and reporting data differently, with only a few that use a physician forecasting model.

Summary of innovation: One consequence of this disjointed approach is that Atlantic medical students have expressed as their top concern the limited access to data on the current and projected physician workforce. To address this issue, the Health Human Resource Task Force (formerly Atlantic Task Force) of the Canadian Federation of Medical Students has created a national interactive platform that uses a map of Canada, a comparison table, and a trend graph to illustrate the demand for physicians in our society. Users can filter by year, specialty, and province or territory (including regions) to personalize the most relevant data on the physician workforce amalgamated from several publicly available sources.

Conclusions: We believe that informing medical students with workforce realities during pre-clerkship will guide career choices based on both personal interests and social accountability. Our group has also identified collaboration, social accountability, and artificial intelligence as the three fundamentals to modernise physician resource planning strategy. Overall, these efforts contribute to the vision of stewardship for an integrated Canadian health care system.

LP18-07-60889

Do Canadian medical graduates perceive the process for the selection for Family Medicine (FM) Residency training in Canada as fair?

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Background/Purpose: Every year, Canadian medical students apply to Family Medicine(FM) residency programs. Organizational justice theory indicates perceptions of fairness in selection are based on both process and outcome. The job-relatedness of the assessments used is also a factor. This study measures, for the first time, students' perceptions of fairness in FM Residency selection in Canada.

Methods: A survey was sent to participating final year medical students who applied to FM following the first-round match(2020 cohort). The survey was also sent to all PGY1 FM residents(2019 cohort).

Results: 173 students and 164 Residents completed the survey.(10% & 14% response rates). Only 35%(2020) and 20% (2019) indicated any Situational Judgement Test(SJT), in all or most programs, related to the role of a Family Physician(FP). In contrast, 88%(2020 & 2019) indicated a traditional interview and 81%(2020) and 76%(2019) found the multiple mini interview(MMI) content in all or most programs related to the FP role. Only 41%(2020) and 23%(2019) felt the SJT was a fair selection tool compared with 80%(2020) and 73%(2019) for traditional interviews and 67%(2020) and 65%(2019) for MMIs in all or most programs. Overall, 77% (2020) and 75% (2019) felt the selection process for FM was fair in all or most programs.

Conclusions: The majority of Canadian medical students found selection for FM Residency to be fair. Most found traditional interviews and MMIs to be fair and job-related. This was not the case for SJTs.

Posters

Assessment

P1-01-60595

Are different station formats assessing different constructs in Multiple Mini Interviews? Findings from the Canadian Integrated French Multiple Mini Interviews (IFMMI)

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Background/Purpose: Multiple mini-interviews (MMI) are used to assess non-academic attributes for selection in medicine and other healthcare professions. It remains unclear if different MMI stations formats (discussions, role-plays, collaboration) can assess different constructs.

Methods: Based on station's format of the 2018-2019 IFMMI (5 discussions, 3 role-plays and 2 collaboration stations), we performed confirmatory factor analysis (CFA) using the lavaan 0.6-5 R package (Rosseel, 2012) and compared a one-factor solution vs three-factor solution to applicants of the 2018 (n=1438) and 2019 (n=1440) cohorts of the IFMMI across three medical schools in Quebec, Canada.

Results: The three-factor solution was retained, with discussions, role-plays and collaboration stations all loading adequately with their scores. Furthermore, all three factors had moderate covariances together (range 0.44 to 0.64). The model fit was also excellent with a Comparative fit index (CFI) of 0.983 (good if >0.9), a Tucker Lewis index of 0.976 (good if > 0.95), a Standardized Root Mean Square Residual of 0.021 (good if < .08) and a Root Mean Square Error of 0.023 (good if < 0.08) for 2018 and similar results for 2019. In comparison, the single factor solution presented a lower fit (CFI=0.819, TLI=0.767, SRMR=0.049 and RMSEA=0.070)

Conclusions: The IFMMI has a stable tridimensional structure across two cohorts that was explained by station formats, suggesting that different station formats are assessing different but related constructs, reinforcing the

construct validity of an MMI with multiple station formats. Further studies should try to characterize these constructs and look for differential predictive validity according to station format.

P1-02-60603

Comparison of the English and French versions of the CASPer Test in a bilingual population

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Background/Purpose: The University of Ottawa MD program has two different streams to which candidates may apply: a francophone stream and an anglophone stream. As the admissions office receives applications in both French and English, they are required to ensure that the tools used to assess candidates are psychometrically equivalent across both streams. CASPer is a standardized test they recently adopted to assess the non-cognitive competencies of applicants and is offered in both English and French. The objective of this study is to compare the psychometric properties of the English and French versions of CASPer.

Methods: We collected data from all CASPer test-takers across three cohorts (n = 12,463; entry 2016, entry 2017, entry 2018). We first compared the difficulty of the test between the French and English version using proxy indicators (i.e., time to completion, typing speed). We then compared the psychometric properties of the two versions based on their internal-consistency reliability and applicant acceptability

Results: There were some indications that the French version may be slightly more difficult than the English version of the CASPer test. However, it is unclear whether this difficulty is due to the difficulty of the individual test items or to differences in the characteristics of the cohort. Nevertheless, a comparison of the psychometric indicators suggests that both French and English versions of CASPer are psychometrically sound and equivalent.

Conclusions: Although CASPer scores cannot be directly compared between the English and French versions, the psychometric properties of the assessment were retained across the two versions. These results provide preliminary evidence that the psychometric strengths of the English version of CASPer likely extend to the French version of the assessment.

P1-03-59484

Pharmacy students use guided reflection and entrustment (EPA) assessments to appraise 'secret' patient/pharmacist encounters in the selfcare community workplace

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Background/Purpose: Pharmacists are entrusted to help patients minimize risks and maximize benefits when self-selecting treatment for minor ailments. Patients often initially access the Internet for advice. Undergraduates must understand and assimilate both patient and pharmacist perspectives on their path to self-regulated practice.

Methods: Second year (pre-clinical) students (n= 240) posed as patients seeking a pharmacist's advice in a community pharmacy, after having reviewed Internet sources. Using structured guided reflection, they analyzed relevant aspects of the encounter, completed an EPA assessment of the observed pharmacist and proposed measures to personally optimize implementation of this responsibility when in practice. Perceptions were analyzed from observations, reports, surveys, class discussions and interviews. EPA rankings (anchored to 5 levels of supervision) were tabulated.

Results: Student reflections, as patients, highlighted themes of entrustment and confidence in the pharmacist as an authoritative resource. As prospective pharmacists, they evaluated the clinician in terms of best practice guidelines, competencies demonstrated, barriers observed during the consultation and feelings about their future professional role. EPA reports rated the majority of pharmacists able to practice independently/unsupervised and 20% as role-models/able to supervise others. Time constraints for communication, rather than content expertise, was the primary obstacle.

Conclusions: Students valued this contextual opportunity to directly experience competencies required for patient care prior to their clinical year: subject expertise, communication, collaboration, professionalism, advocacy and scholarship. Assessing practitioners' level of entrustment was considered transformative in reinforcing the importance of expertly performing this professional role with appropriate time management once in practice.

P1-04-60598

Assessing medical students' communication skills in using Electronic Medical Records during simulated patient encounters from the patient's perspective

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Background/Purpose: Given the widespread adoption of Electronic Medical Records (EMRs) in medicine , attempts have been made by educators and policy leaders to introduce EMR education into Canadian medical school curricula. Despite efforts being made to introduce EMR learning, there is little literature related to the assessment of EMR-related competencies. As such, we have developed and piloted an objective structured clinical examination (OSCE) station aimed at assessing EMR communication competencies in medical students. This abstract reports on the feedback from standardized patients (SPs) involved in pilot.

Methods: This study was conducted at University of Ottawa as part of a third year OSCE. An EMR pilot station was developed, built in OpenLabyrinth and designed to emulate MedAccess©. Students' communication skills were assessed by Standardized Patients (SPs) and physician examiners using checklists and ratings scales. Three SPs then participated in a one-hour focus group, facilitated by one of the investigators to discuss their experiences in the pilot.

Results: Transcripts of the focus group were inductively coded by three investigators. Resulting themes included perceptions around technology (changes in technology, acceptance of technology, contrasting EMR vs. paper, age of students and patients); competency in communication (non-verbal communication, importance of communication skills, impedance/distractors of effective communication); case design (SP training, engagement, SP reluctance to evaluate students); ownership of health information (clinician-patient relationship, patient health literacy/numeracy); and charting/EMR usage.

Conclusions: Involving SPs in the OCSE assessment complicated logistics of the station. The SP perceptions around student-patient communication will be used to refine the EMR pilot station OSCE.

P1-05-60639

How to measure utilization of Electronic Medical Record (EMR) in patient-physician communication from a patient perspective

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Background/Purpose: The American Medical Association recommends soliciting patient feedback on physician EHR use. In Canada, national statistics indicate that physicians who use EMR report they are more efficient and patients with access to their health information feel better able to manage their health. This study's goal was to evaluate a rating scale measuring medical students' utilization of EMR from the patient's perspective.

Methods: This study was conducted at University of Ottawa as part of a 3rd year OSCE. A rating scale assessing candidates' use of EMR while counselling a patient (EMR Utilization) was added to an existing standardized patient (SP) scoring grid which included four rating scales. Data from 99 students was collected.

Results: SPs covered the entire scale range for EMR Utilization. This scale had the most spread among the four scales and the lowest mean (3.7/5). EMR Utilization correlated with the remaining three SP ratings; Communication being the strongest (corr = 0.644). It also correlated with Information Giving scale filled out by physician examiners. (corr = 0.224). Employing some graphical presentation included in the EMR during the consultation was a predictor of the SP total score (t(97) = -2.079, p = 0.041).

Conclusions: This pilot not only demonstrates feasibility but also indicates that SPs can reliably assess physician's effectiveness of EMR utilization in counselling.

P1-06-60649

Evaluation of Entrustable Professional Activities Assessment in Undergraduate Medical Education using Mobile Technology

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Background/Purpose: Memorial University introduced Entrustable Professional Activities (EPAs) into an undergraduate clerkship curriculum as formative

assessments. This study applies the Norcini et al. (2018) consensus framework for good assessment to evaluate a mobile system in assessing undergraduate EPAs during clerkship.

Methods: An electronic clinic card was developed for mobile use by both clerks and preceptors. Clerks were tasked with transcribing in-the-moment coaching and assessment discussions with preceptors. Assessments were collated and analyzed by ordinal regression, and users were surveyed on satisfaction with the new modality.

Results: The mobile eClinic Card system enabled 80 clerks and 624 preceptors to document 6,850 submissions that included 18,661 EPA scores across 47 clinical sites over a 48-week core clerkship curriculum. The rating system was found to be generally consistent, reliable and equivalent between preceptors, clinical sites, or the specific activity assessed. Clerks documented progressive improvement. Some differences between disciplines were found in rating odds, in preceptor composition and workload. Student odds of success did not correlate to subject examination scores. Preceptors and students were satisfied with ease of use and dependability of the eClinic Card mobile app; however, clerks suggested the quality and utility of formative coaching feedback could be improved. Preceptors felt enhanced faculty development would be beneficial.

Conclusions: Findings support the utility, feasibility and acceptability of a mobile system in assessing work-based Entrustable Professional Activities within clerkship curriculum. Change management is a major determinant of success and user engagement is essential for uptake of mobile technologies for work- based assessment.

P1-07-60713

How to measure "Fit": Standardized comparison of program and applicant alignment of values and priorities

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Background/Purpose: As USMLE Step 1 scores transition to Pass/Fail, GME selection may need additional standardized data points. NRMP surveys of programs and applicants indicate "goodness of fit" as one of the most important factors influencing ranking. However, little consensus exists on what "fit" is and the factors that influence its perception.

Methods: This study sought to understand the factors influencing the concept of applicant/program alignment across GME programs, with a goal of creating a standardized measure of fit. Various perspectives of key stakeholders and subject matter experts including residency program directors, applicants and current residents were examined.A modified Delphi survey was conducted across 2 rounds, consisting of 47 potential factors, based on SME interviews and the literature. Diverse stakeholders (DIOs, Program Directors, Faculty, Residents, & Medical Students) participated in the Delphi and were asked to each factor on a Likert-type 4 point scale.

Results: 38 SMEs responded to the 1st round of the Delphi survey Of the 47 factors, 34 reached consensus with a-priori ranking determined to be a threshold of 55% consensus. In the 2nd round consensus was reached on 4 additional factors. After integrating feedback on redundancy and terminology, 30 factors remained. The factors were then organized into 3 themes: culture, pedagogy and work environment for the assessment use in GME selection.

Conclusions: The results of the Delphi survey will be used to populate a paired-comparison ranking tool used in GME selection during the Fall of 2020 across thousands of applicants and multiple programs. This standardized method of evaluating fit will provide a more objective measure of including this important factor in selection.

P1-08-60547

Do high grades prior to MD studies lead to higher academic achievement during the MD curriculum and higher scores on licensing examinations?

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Background/Purpose: Until 2018, at our institution, student applying to the MD program were selected for admission based on 2 criteria: a standardized grade point average (GPA) and a multiple mini interview (MMI) score. The GPA accounted for 50% of the total score for admission. With this study, we wished to answer this question: is the standardized GPA a reliable performance predictor for grades during the MD curriculum, and for the Medical Council of Canada Qualifying Examination Part I (MCCQE I)?

Methods: From 2008 to 2015, data were prospectively collected from all students entering the MD program. Data

included: GPA from pre-university or university studies, mean grades in years 0 (pre-med) 1 and 2, grades from project-based learning and courses throughout MD studies (eg: basic anatomy, digestion and nutrition, heart and circulation), end-of-curriculum written exam and OSCE scores, and MCCQE I results. Pearson's coefficient was used to analyse the relationship between these scores.

Results: GPA showed weak correlation to year 0 (r=0.296, n= 646, p<0.001), year 1 (r=0.231, n=1113, p<0.001), and year 2 (r=0.258, n=1098, p<0.001) mean grades. GPA presented no correlation to end-of-curriculum written examination scores (r=-0.034, n=579, p=0.416) or OSCE scores (r=0.008, n=838, p=0.813). GPA also correlated poorly (r=0.202, n=1805, p<0.001) with results at MCCQE I.

Conclusions: While high grades are still considered an important standard for admission to our MD program, they do not demonstrate a strong correlation to high-stakes, end-of-curriculum and licensing examinations. Further analysis will help to determine if different weighing assigned to GPA and MMI scores, or if additional criteria for admission to our MD program would yield improved results.

P1-09-60548

[Low-stakes progress test results are excellent predictors for success at the Medical Council of Canada Qualifying Examination part I]

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Background/Purpose: At Université de Montréal, progress tests (PT) are formative assessments which are administered on the final 2 years of the curriculum. We sought to assess the value of these tests for predicting success to the Medical Council of Canada Qualifying Examination part I (MCCQE I).

Methods: Five compulsory, formative PTs have to be taken by students during clerkship, the first 3 in year 3, and the last 2 during year 4. From 2013 to 2018, student scores from PTs and MCCQE I were prospectively gathered, and Pearson's coefficient was used to look for a relationship between the two. PT scores were also divided into deciles and analysed for risks of failing the MCCQE I.

Results: Results of 1496 students were analysed. A strong correlation was shown between PT scores and MCCQE I scores (r=0.635, n=1496, p<0.001). A good correlation of

PT and MCCQE I scores was demonstrated from PT #3 (Pearson's r > 0.500). Students with mean PT scores in the lower decile were 6 times more likely to fail the MCCQE I (RR=6.4673, 95%IC 3.7727-11.0872, Z=6.788, p<0.0001) than those with mean scores in the higher deciles. Compared to those with no PT score in the lower decile, students with 2 PT scores in the lower decile had a RR of 20.9804 (95% CI 7.3114-60.2038, Z=5.659, p<0.0001), and those with 3 PT scores or more in the lower decile had a RR of 42.2716(95% CI 15.8893-112.4586, Z= 7.500, p<0.0001) of failing the MCCQE I.

Conclusions: Progress tests, as low-stakes assessments, are good predictors of MCCQE I scores. Moreover, students with very low PT scores are at higher risk of failing the MCCQE I. Analysis of PT scores can help to identify, as early as 1 year ahead of licensing examinations, students who could beneficiate from additional academic support.

CME & Faculty Development

P2-02-60100

[Working towards practice improvement: An examination of context, mechanisms and outcomes impacting QI action plans]

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Background/Purpose: The Medical Council of Canada national multisource feedback (MSF) program is an assessment for quality improvement (QI) that focuses on collaborator, communicator, and professional roles. Interpreting MSF data, translating it into QI plans, and enacting change depends on multiple factors (Sargeant et al., 2015). This study used realist inquiry methods (Dalkin et al., 2015; Pawson & Tilley, 2001) to assess the context, mechanism, and outputs of MSF data when coupled with a facilitated feedback discussion for QI plan creation and enactment.

Methods: Data included linked demographics, MSF ratings and comments, reports summarizing a phone conversation between the physician and facilitator, two to three physician generated action plans, and 6-month follow-up status of plan implementation for 50 family medicine physicians. A realist inquiry methodology was used to iteratively review, identify, and code factors related to context, mechanisms, and outcome configurations of MSF data use.

Results: Physicians who completed all of their plans had plans that tended to be co-constructed, drew on data with

repeated messages, and had messaging about where the physician could 'do better' in the narrative data component. For those who completed at least one plan, it didn't seem to matter whether the changes were simple or difficult. For those who didn't implement any plans, action plan difficulty was an important factor.

Conclusions: MSF data acceptance, use, and QI implementation is moderated by multiple contextual factors. However, having consistent messaging from different perspectives coupled with a discussion with a peer reinforces the formulation of realistic and actionable plans.

P2-03-60770

Continuing Professional Development Scholarship in Canada: A scoping review.

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Background/Purpose: Continuing professional development (CPD) as an agent of change in healthcare reform could contribute to resolving misalignments in the Canadian healthcare system which is struggling to manage economic, political and epistemological challenges but little is known about areas of focus within Canadian CPD scholarship. This study aims to identify terminology, conceptual frameworks, methods, and themes reported in the CPD literature over the last decade.

Methods: Guided by a 6-stage framework (Arksey & O'Malley), this scoping review included white literature related to CPD, targeting physicians, and published in Canada in English/French between 2008-2019. Five databases were searched, and data-charting was iteratively developed. Studies were coded independently and reviewed in pairs to ensure accuracy and reliability.

Results: Of the original 3978 identified references, 595 met our inclusion criteria. Publications primarily targeted family physicians (49%). Most focused on research (48%) and evaluation (21%) while only 11% cited a theoretical framework. Seventy-three percent focused on education techniques/ approaches compared to 10% focused on organization and systems level concerns. Terminology included CME (34%) and CPD (27%).

Conclusions: The CPD literature focuses attention on physicians alone, with limited discussion on physicians within intra- or interprofessional settings. The shift in terminology indicates moving from a medical-centric individual (CME) to a broader approach addressing multiple competencies (CPD). The limited use of theory may impact the ability of CPD scholarship to act as an agent of change in health reform. This review contributes to an understanding of areas of focus and potential gaps in the CPD literature.

P2-04-60288

Overcoming Barriers to Safe Opioid Prescribing: Extending the reach during the COVID-19 Pandemic

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Background/Purpose: In early 2020, NOSM CEPD launched an online CPD module "Overcoming Barriers to Safe Opioid Prescribing" (OBSOP) to a target audience of Northern Ontario primary care providers ("providers"), funded by Health Canada. With COVID-19's onset OBSOP registration and engagement plummeted as providers responded to the emerging crisis. Simultaneously resident electives were cancelled (travel restrictions, preceptor availability). As Northern Ontario is disproportionately affected by the ongoing opioids epidemic, OBSOP was an opportunity to increase resident non-clinical education in a high clinic need area.

Summary of innovation: Collaborating with Post Graduate Education, CEPD offered OBSOP to current NOSM residents. There were no registration restrictions or content changes. Impact was evaluated by existing pre-/post-module evaluations and meta-data.

Conclusions: NOSM CEPD pivoted quickly to offer key curriculum to residents safely and effectively. Resident data showed: • Course was accessible; content was relevant. All but two outlined impact on future practice. • Five learning themes emerged: Understanding of opioids; knowledge/skills for patient communication; prescribing knowledge/attitudes; tapering strategies/skills; and tools/resources. • Residents and providers emphasized distinct areas of value. Residents most often identified tools to be most valuable, followed by tapering strategies/skills. Providers more often focussed on changes to prescribing knowledge/attitudes, and to patient communication. Pandemic circumstances highlighted opportunities to provide common curriculum beyond CPD's "regular" mandate for faculty. By engaging residents, OBSOP increased uptake and extended reach. Evaluation supports CPD's potential to offer value to a continuum of learners, which should be considered during development.

P2-05-60564

Strategies to assess unperceived educational needs of physicians: A Scoping Review

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Background/Purpose: Assessing needs prior to developing continuing medical education (CME) programs is a crucial step in the education process. A previous systematic literature review (Myers 1999) described a lack of objective evaluation for learning needs assessments in primary care physicians. This scoping review updates the literature on objective strategies to assess physicians' unperceived needs in CME.

Methods: The scoping review approach by Arksey and O'Malley (2005) was used to systematically map the literature on approaches to unperceived needs assessment. Academic literature was searched using electronic databases Ovid MEDLINE, EMBASE, ERIC and Cochrane. Grey literature was searched using a Google Custom Search Engine following the Grey Matters protocol. Focus was on physicians in a CME context.

Results: The search identified 2403 articles, 76 articles were identified for inclusion in the study (54 research, 10 theoretical, 12 grey literature). Research studies predominantly reported knowledge assessment strategies (multiple-choice tests), where theoretical literature promoted performance evaluations (chart audits) and the grey literature emphasized secondary data assessment approaches (environmental scans).

Conclusions: Performance-based assessment strategies are highly recommended in non-research articles yet have low levels of implementation in published studies. In grey literature, analysis of secondary data through patient input or environmental scanning is emphasized more so than in peer-reviewed theoretical and research articles. These gaps between theory-based recommendations and research studies are likely due to resource constraints rather than lack of awareness. Future evaluations should incorporate multiple needs assessment strategies and make assessments actionable by describing the implementation process and resource management.

P2-06-60316

Creation of just in time videos for healthcare educators on using synchronous technologies (zoom)

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Background/Purpose: The current pandemic has caused a rapid shift to "emergency" online teaching, with little preparation of teachers and learners on best practices, particularly in synchronous (webinar) environments. To our knowledge, no comprehensive resources exist for faculty development in synchronous teaching for a healthcare context. When transitioning to synchronous learning, educators need to develop self-efficacy and comfort level in using technology as well as incorporate the same effective principles that are important in face to face (F2F) teaching, (e.g. interactivity, feedback, repetition, reflection, social learning).

Summary of innovation: Using Agile software development methodology, we discuss the creation of 2 videos series (for educators and for learners), each with 7X 5min videos. This presentation will discuss 1. background, and design of the project 2. scripting, and Agile process 3. synergistic collaborations and dissemination 4. usage analytics to date (YouTube) We chose video to allow bite sized, on the go, just in time, repetitive, practical hands-on and reflective learning across multiple devices, for busy physicians, already overwhelmed by pandemic changes. Inter-institutional and national collaborators were engaged to ensure the content was applicable across multiple contexts and locations.

Conclusions: This iterative approach using an Agile framework for video creation may assist others in building technology enhanced faculty development. These videos and associated resources may also help faculty development in synchronous education, through knowing "what buttons to push" in these environments but also examining the pedagogical reasons for choosing them.

P2-07-60846

Certificate Program on global health equity

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Background/Purpose: Global health learning should be a continuum from medical education through professional practice, focusing on structural and health inequities.

Methods: Among undergraduate and post-graduate training opportunities and certificates offered in global health few programs combine the local and the global through an equity lens. This certificate program takes a social medicine approach, putting social determinants at the forefront and encourages participants to think about the structural obstacles to health equity around the world.

Results: The Certificate in Local and Global Health Equity, an accredited program offered through the Office of Professional and Educational Development at Memorial University is an online, interdisciplinary, interactive opportunity for professionals and learners. The program covers social determinants, globalization, disease, inner city issues, addictions, women's health, children's health, humanitarian response, Indigenous health and Newcomer health, development theory with both local and global perspectives. Assessment is participation and reflection based.

Conclusions: Global health educational opportunities among health professions and learners are important in light of increasing globalization, population migration and the COVID 19 pandemic. Participants gain insights into political and social factors that shape the burden of disease. In its fourth iteration, program evaluations indicate that module objectives are met and narrative comments are consistently positive. Participants reflect on the value of the curriculum content and the rich interactive discussions. This program is an innovative learning opportunity that encourages dialogue on complex issues that shape global health to strengthen the basis for advocacy and policy change both locally and globally.

P2-08-60862

Leader effectiveness and leadership development in physician leaders

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Background/Purpose: Leadership is a critical element in the outcome(s) of any organization, with these outcomes often dependent on the leader's skills, knowledge, abilities and competencies. The purpose of this project was to conduct a study of physician leaders across Canada to investigate the effects of age, gender, and experience on leadership development and self-perceived leader effectiveness.

Methods: 151 physician leaders from across Canada completed an online survey. Participants were asked to rate their leader effectiveness (LE) in their current leadership role and complete the LEADS self-assessment questionnaire. Independent samples t-tests and one-way ANOVAs were used to explore demographic variables on leadership development (LD) and LE.

Results: Older participants showed greater LD across all LEADS domains (ps<.05); this was particularly true between leaders in the oldest age group (55+) and the youngest (<45). As well, older participants had significantly higher self-perceived LE than both the youngest and mid-aged groups (ps<.05). Females rated themselves lower on average than males on all but one leadership variable (develop oneself), and the differences in several of these were significant (ps<.05). Overall, male participants had higher LE than females (p<.05). Participants in senior leadership roles perceived themselves to be more effective leaders than both frontline or mid-level leaders and showed significantly higher LD on most of the LEADS items (ps<.05).

Conclusions: Demographics were found to play a significant role in perceptions of LE and LD. These results hold significance for health organizations to enhance individual and collective leadership within their areas of influence and mandates.

COVID

P3-01-60571

Teaching in the context of a pandemic: a faculty development activity supporting clinician-teachers

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Background/Purpose: COVID-19 has changed the practice of clinician-teachers and has put barriers to traditional bedside or operation room teaching methods. Challenges lie in maintaining clinical exposure while ensuring students' safety. Our faculty development program has developed an online course based on best practices in clinical supervision adapted to the pandemic to support the needs of our teachers. We aimed to assess the satisfaction of our teachers and applicability of the suggested modified teaching methods in their practice.

Summary of innovation: A one-hour, pre-recorded faculty training course was available to all Université de Montréal teachers. The topics covered were: orientation of

students/residents, use of telemedicine, clinical supervision and rounds, teaching procedural skills, and well-being. Participants were invited to answer a mixed methods questionnaire after completing the course. Descriptive statistics and thematic analysis were carried out. Of the 47 participants who took part in the training, 25 responded to the survey (25/47: 53%). Twenty-three participants (92%) stated that they had achieved the main objectives of training. The majority of participants (23/25; 92%) reported that the different strategies discussed could be applied in their practice and several reported the intention to apply these strategies.

Conclusions: A one-hour online course on suggested alternative and modified teaching methods to implement during the pandemic was a relevant and appreciated course for our faculty. The majority of participants reported that these methods were easily transposed to their teaching practice.

P3-02-60771

An Online Faculty Development Course on Teaching During COVID: Lessons Learned

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Background/Purpose: COVID-19 has had a significant impact on the learning environment and brought with it the need for timely and effective faculty development to help medical teachers adjust to the challenges associated with online teaching and remote supervision.

Summary of innovation: Dalhousie Medical School offers online, asynchronous faculty development courses on a variety of educational topics. In July 2020, we introduced a course to our Fundamentals of Teaching Series to address the needs of clinical and didactic teachers operating under the restrictions imposed by the pandemic. Entitled "A Practical Approach to Teaching During COVID", the course comprised a series of four modules with assigned readings, moderated discussion boards, and webinars. In total, 50 faculty registered for the program and 25 completed all the required components. Other participants only accessed certain components of the course, such as the webinars. Analysis of comments on the discussion boards identified areas of concern including navigating technology, attending to learner wellness, and building community in a virtual setting. 15 participants responded to a program evaluation survey sent out following completion of the course. All agreed that they would be able to use the

information they learned, and there were positive comments regarding the emphasis on applicable strategies as well as the opportunity to interact with other educators.

Conclusions: Our experience shows that an online course on teaching during COVID can be popular and well-received. These findings provide insights into the needs of medical teachers which may be useful for quality improvement and program development related to this topic.

P3-03-60570

Pivoting in a Pandemic: Rapid Development of a Virtual Comprehensive COVID Curriculum

Stacey Bernstein University of Toronto, **Clare Hutchinson** University of Toronto, **Shibu Thomas** University of Toronto, **Angela Punnett** University of Toronto

Background/Purpose: The COVID-19 pandemic necessitated the immediate removal of all clerks from the clinical environment. The conversion of in-person clerkship seminars to a virtual format allowed students to continue learning from home, yet significant changes to the provision of health care occurred in their absence. With only a few months to prepare, a just-in-time curriculum was developed to address these changes and prepare students for a safe and successful return to clinical practice.

Summary of innovation: Informal needs assessments with MD program leadership guided development of our two-week virtual curriculum which combined 12 hours of large group lectures, 3 small group sessions requiring over 100 preceptors, and mandatory in-person PPE donning and doffing simulation. Clinical curriculum included COVID care across the age continuum; palliative care delivery in COVID patients; and a boot camp on virtual patient care with a small group virtual standardized patient encounter. A group of medical students co-created a 3-part series on ethical considerations in resource scarcity in COVID, with a lecture, small group virtual debate, and panel discussion with experts in the field. Student experience and well-being were addressed by lectures on resilience, practical tips for hospital life during a pandemic, and navigating new tensions in the learning environment. Course evaluations were overall positive. Students preferred the small group work over the lectures.

Conclusions: Since its development this curriculum has also been delivered to the incoming fall 2020 clerks, with

plans to imbed elements into established courses such as pre-clerkship and Transition to Clerkship.

P3-04-60604

The COVID Pivot in Family Medicine: a national survey of undergraduate family medicine clerkship directors

Martina Kelly University of Calgary, **Maria Hubinette** University of British Columbia **Martina Kelly** University of Calgary, **Alexandra Thomas** University of Calgary, **Lynn Power** Memorial – University of Newfoundland

Background/Purpose: The COVID pandemic led to dramatic changes in undergraduate medical education. The aim of this poster is to describe the challenges faced, responses enacted and anticipated adaptations required in Canadian undergraduate family medicine as medical education evolves in response to the ongoing COVID crisis.

Methods: On line survey of Canadian Undergraduate and Clerkship directors in family medicine. The survey consisted of a mix of quantitative and qualitative questions.

Results: 15 out of the 17 Canadian schools responded. While developing virtual curricula was initially challenging, many schools rapidly developed on line material, which is being shared across schools, building on the shared on-line LEARN-FM curriculum (https://sites.google.com/site/sharcfm/). The biggest challenge both in the initial return to clinical teaching and ongoing, is capacity for learners in family medicine. The transition to virtual care, requirements for social distancing in clinic and concerns for population safety in rural communities requires FM Clerkship directors to re-double their efforts to retain and recruit preceptors for undergraduate medical students. Personal and protective equipment was provided to students but at some schools community preceptors had to secure and apply for re-imbursement. All the schools who responded are providing PPE for community based learners. Concerns for capacity are compounded as a number of schools juggle double - or larger cohorts of clinical learners. A further concern is graduates competency as some FM clerkships are reduced in length.

Conclusions: Adapting to virtual visits requires ongoing creative solutions in family medicine to ensure medical student exposure to comprehensive and community based care

P3-05-60543

Procedural Simulation of Adult Surgical Cricothyrotomy for Anesthesiology and Acute Care Residents: Adapted for COVID-19

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Background/Purpose: In a CICO (cannot intubate, cannot oxygenate) situation, anesthesiologists and acute care physicians must be able to perform an emergency cricothyrotomy (front-of-neck airway procedure). In COVID-19 airway management guidelines, bougie-assisted surgical cricothyrotomy is the recommended emergency strategy for CICO situations.

Summary of innovation: CICO are high-acuity situations with rare opportunities for safe practice. We designed a four-hour procedural simulation workshop for sixteen medical residents. They were given pre-requisite readings, a lecture, and videotaped demonstrations. Two clinical scenarios introduced deliberate practice on partial-task neck simulators and fresh cadavers. We surveyed thirty-two residents in anaesthesiology and emergency medicine who reported that the workshop was well structured, appropriate for their level, and authentic. Participants were confident that the workshop improved their technical skills. We analyzed narrative comments related to three domains: preparation for the procedure, performing the procedure, and maintaining the skills. Participants highlighted the importance of performing the procedure many times and mentioned the representativeness of fresh cadavers.

Conclusions: To complete an infrequently performed procedure within 60 seconds, participants must remember instantly its basic steps and pitfalls. To prevent cognitive overload, we provided a silent video demonstration. We segmented the procedure and asked participants to verbalize the five steps of the procedure on multiple occasions. Mental imagery, live video feeds, telesimulation and 3D printers can be used to adapt the workshop to physical distancing recommendations. In this case, we suggest allocating 30 minutes to each participant to allow the supervision of at least five successful procedures.

P3-06-60516

COVID-19 Palliative Care Teaching in a Return to Clerkship Session

Giovanna Sirianni University of Toronto, **Risa Bordman** University of Toronto, **Donna Spaner** University of Toronto, **Sarah Yip** University of Toronto, **Shivani Patel** University of Toronto

Background/Purpose: During the start of the COVID-19 pandemic, in-person clinical clerkship was paused. To prepare students returning to clinical spheres, a novel Return to Clerkship curriculum was developed with one session focused on palliative care in the context of the pandemic.

Summary of innovation: A small, interprofessional working group, including MD Program palliative care education leads, a clinical nurse specialist and a medical student came together to develop these sessions. Objectives included 1) Recognizing and treating symptoms related to COVID-19 at end-of-life 2) Identifying those at risk for complicated grief 3) Explaining and counselling patients on goals of care (GOC) using a serious illness conversation (SIC) framework. A one hour virtual didactic session was followed by a one hour small group learning session. One common clinical case was developed to link the two sessions. The small groups were facilitated by a palliative care clinician using VitalTalks video clips and a group debrief. The small group focus was on learning a framework for GOC conversations and addressing potential challenges faced by students in the provision of patient care during the COVID19 pandemic.

Conclusions: Student feedback rated the didactic lecture at 3.55/5 (n=57). The small group sessions were rated higher at 4/5 (n=63). Narrative feedback included that the sessions were 'helpful,' 'relevant' and 'engaging.' These sessions came together in a very short period of time with over 30 small group facilitators recruited. Overall, this was an excellent and timely way to include further palliative care content into the undergraduate curriculum while supporting students returning to clerkship.

P3-07-60905

Creating a pre-clerkship bootcamp in the midst of a pandemic

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Background/Purpose: At Université de Montréal, the pandemic forced the interruption of clinical patient encounters for 2nd year undergraduate students. During this period, students usually progress from direct to indirect supervision for medical history taking. A pre-clerkship bootcamp was created to palliate for this loss and to better prepare students to the reality of medical practice during a pandemic.

Summary of innovation: A bootcamp course committee including academic directors, education leads, and students was formed in June 2020. The course was constructed on learning objectives centered on cancelled clinical activities, students' perceived needs to prepare for clerkship and critical information about COVID. The objective was to hold a 4-week bootcamp starting August 2020 ending with a formative assessment. The curriculum included in-person history-taking and physical examination in an outpatient setting followed by case history redaction and virtual feedback sessions by clinician educators, and a telehealth consultation with a patient-educator focusing on communication skills. E-learning modules on telehealth issues, perioperative asepsis, pediatric examination skills and approach to common musculoskeletal complaints were also created. Lectures on current knowledge of COVID-19, workshops on dealing with uncertainty and distant learning, and student led sessions on maximizing learning opportunities during clerkship were held. All 292 students successfully completed the course and assessment.

Conclusions: Pre-clerkship students were able to attend a mixed modality bootcamp created in a short time. Although data on student perceived benefit after the beginning of clerkship has yet to be obtained, immediate appreciation of the course was excellent, and students felt safer prior to starting their clerkship.

Works in Progress

P4-01-60292

Virtual Culinary Medicine Labs: A Northern Ontario School of Medicine (NOSM) and University of British Columbia (UBC) Collaboration

Joel Barohn University of British Columbia, **Lee Rysdale** Northern Ontario School of Medicine

Background/Purpose: Building on the CCME John Ruedy Education Innovation Symposium (2019), NOSM's Culinary Medicine (CM) program aims to increase undergraduate medical student nutrition and lifestyle medicine competence while improving their health behaviours. A proven teaching strategy in over 50 US medical schools, CM is an innovative approach with positive dietary and psychosocial patient outcomes. Front-runners in CM have adapted education approaches

to mitigate the COVID-19 challenges including a NOSM and UBC partnership to assess the feasibility, acceptability, and impact of virtual versus previously successful in-person programming.

Summary of innovation: A CM curriculum including Canadian clinical nutrition practice guidelines and virtual education best practices were used to develop and deliver two different two-hour sessions in April and May 2020. Sessions were promoted to medical students (Years 1 and 2) and dietetic interns at both schools via electronic flyers/newsletters, emails and word of mouth. Students pre-registered online including their nutrition questions which were incorporated into session content/resources. A voluntary online post-session evaluation assessed nutrition knowledge, planned health behaviour(s) changes, future practice confidence and overall session satisfaction.

Conclusions: A total of 52 participants (21 medical and 31 dietetic students) attended one of two sessions. While in-person was preferred, students enjoyed learning with other schools and programs while gaining additional knowledge and experiences through shared faculty expertise from both schools. Positive attendee feedback and faculty experience demonstrated virtual CM programming was feasible and effective during the pandemic and beyond; five additional sessions will be delivered in fall/winter 2020-21. Tailored inter-school CM programs yielded higher participation rates, enhanced interdisciplinary learning including practical food skills linking nutrition science and medical education while effectively utilizing limited faculty resources.

P4-02-60654

Digital Health: Interdisciplinary engagement to foster industry growth

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Background/Purpose: Healthcare and education in the 21st century must transcend physical walls. Technologies can support patient/client self-care behaviours and enable more timely access to patient/client information and consultations with other interprofessional healthcare team members. Digital Health is a multidisciplinary field that involves the use of information and communications technologies to facilitate healthcare delivery and address the health information needs faced by patients and health care professionals.

Summary of innovation: A provincial symposium brought together researchers and experts in the field of digital health, governmental and health delivery stakeholders, health care professionals, and representatives from professional associations and industry to help nurture opportunities for growing interdisciplinary digital health research programs to advance the health of the people and communities we serve. Topics included clinical applications of digital health, demonstrations of innovations, interactive/panel discussions, patient perspectives and business model implications.

Conclusions: The event was well-received and highly rated by participants who felt their learning needs were met and expanded their knowledge on initiatives and opportunities throughout the province while remaining relevant to their practice. The prevalent suggested improvement to future events would be to expand the schedule and scope of such an event to bring increased government, industry and medical allied health voices into the discussion. The success of this event lead to additional funding and the delivery of a regionalized digital health symposium focused on public engagement, rural innovation and delivery.

P4-03-60895

The centre is not always in the middle: The power of knowledge brokering in social accountability.

Jill Allison Memorial – University of Newfoundland, **Rachel Brown** Northern Ontario School of Medicine, **Erin Cameron** Northern Ontario School of Medicine, **Pauline Sameshima** Lakehead University, **Brian Ross** Northern Ontario School of Medicine

Background/Purpose: Social Accountability (SA) has been recognized globally as a key value in Medical Schools and emphasizes the importance of partnerships, particularly with the communities that are served. A fundamental aspect is the need for communication and the brokering of knowledge across the various domains where what constitutes knowledge is different and takes on different values in context. In our research we explore the role of knowledge brokering (KB) and social accountability. Specifically we ask, how can socially accountable institutions ensure that communications with all partners are productive and reciprocal?

Summary of innovation: As part of a larger funded project, Stories and Art of Learning and Transformation in Health Education (SALT-HE), we utilize arts integrated research methodologies to delve deeper into the meaning of both SA and KB as processes of fundamental connection and reparative curriculum. We work with dialogue and

interpretive approaches as we strive to enhance the way we see schematics such as the Partnership Pentagram associated with SA. Through dialogue we explore the necessary conditions for enhanced models and the supports required for knowledge generation and exchange across partnerships.

Conclusions: We argue that when it comes to communication, the "centre" is not always in the middle as access to power and voice is unequal. We seek authentic ways to engage knowledge brokers in SA institutions, increase receptivity for understanding and communication, develop ways of facilitating the flow of knowledge in many directions, and support actionable goals between partners. We emphasize the importance of engaging across community partners in ways that enable networked support of mutual priorities.

P4-04-60160

Experiential nursing rounds: An opportunity for graduate nurses to process challenges, develop coping strategies, and experience social support within the academic curriculum

Nicole-Ann Shery McGill, **Camila Velez** McGill

Background/Purpose: Nurse trainees experience a variety of stressors in academic and clinical environments, including heavy workloads, challenging patient interactions, and conflict between staff. Occupational stress may lead to burnout, powerlessness, isolation, and attrition from nursing. It is imperative to provide trainees with coping resources to deal with stressors, prevent negative outcomes, and foster emotional well-being. Social support, within the context of support groups, has been found to have a beneficial effect on health outcomes within the nursing population.

Summary of innovation: The WELL Office in the Faculty of Medicine and Health Sciences at McGill University developed the Experiential Rounds, a series of two confidential support groups for nurse trainees (N=20/each), which are offered as part of the academic curriculum. The Experiential Rounds are designed and facilitated by a Wellness Consultant and Registered Psychotherapist, with the goal of helping trainees share their clinical experiences, develop strategies to overcome hardship, build confidence and community. Evaluation results revealed that most students found the sessions useful and helpful to their academic and clinical journeys. Thematic analysis further revealed that students were able to: a) normalize challenges experienced, b) learn

practical tools to manage stress, c) alleviate perfectionism, and d) share experiences in a confidential and safe venue. Suggestions included to have more sessions with smaller student groups.

Conclusions: Experiential rounds may be a promising tool to enhance nurse trainees' ability to cope with stress. Embedding experiential rounds within the curriculum can validate the importance of emotional well-being for a healthier nursing workforce. Recommendations and feedback for implementation of sessions will be shared.

P4-05-60653

NOBL FIIISTT: Framing concepts for the beginner learner in surgery

Geoffey Blair University of British Columbia

Background/Purpose: Learning the concepts of surgery, like any specialized field, can be hard work. Its technical language, diagnostic and procedural concepts, unique problems and solutions, and even the surgeon's mindset can easily confuse and intimidate the beginner surgical learner. Most medical students are reduced to memorizing an overwhelming list of words and facts rather than developing a meaningful understanding of the underlying principles.

Summary of innovation: NOBL FIIISTT is an easily understood conceptual framework for the early surgical learner at the threshold of the more intensive surgical education encountered in their clinical years of training. NOBL FIIISTT is an acronym for those elements of diagnosis and care in which surgeons, as physical interventionists, may play a key role: N-Neoplasms, O-Obstructions, B-Bleeds, L-Leaks, F-Function disorders, I-Inflammatory conditions, I-Infections, I-Ischemia, S-Structural disease, TT-Trauma/Tissue damage. These are the elements of surgical disease and are not confined within organ systems or surgical disciplines, nor are they mutually exclusive. It can help connect the anatomic, physiologic and diagnostic elements that might initially appear conceptually far apart.

Conclusions: NOBL FIIISTT has shown utility as an educational tool in the pre-clinical and clerkship years and also as a pre-graduation surgery review course. The presentation, study and discussion of the NOBL FIIISTT elements helps create meaning for the early surgical learner.

P4-06-60944

The Times They are a-Changin': A Pediatric Bootcamp for Medical Students

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Background/Purpose: Pediatric medicine is traditionally underrepresented, or at least disproportionately represented in pre-clinical components of traditional curriculum designs. As a result, the majority of pediatric focused medical content is taught during the core pediatric clerkship. Our Pediatric Bootcamp was developed to respond to changes in the clinical educational opportunities for clerkship students due to COVID-19. Given the need to shorten core pediatric clerkship to avoid the potential overlap of the 2021 and 2022 cohorts, the bootcamp took advantage of the current crisis to lay a solid foundation in pediatric knowledge and skills prior to return to clerkship.

Summary of innovation: A Pediatric Bootcamp consisting of 14 half-days of core pediatric content was created and delivered in June 2020 while students were displaced from their clinical educational experiences. Clerkship students (Class of 2021) who had not yet completed their pediatrics clerkship, and pre-clerkship students (Class of 2022) were invited to attend and participate in synchronous virtual teaching sessions. Guiding concepts for curriculum development included (1) theme days, (2) case-based focus, (3) approaches to core pediatric clinical presentations, (4) active learning with interactive components, (5) flipped classroom to allow for application during live sessions, and (6) adult learning principles.

Conclusions: Throughout the 3-week period, over 100 students consistently participated in online learning. Student feedback was generally positive, including expressed desire to have a pre-clinical dedicated and consolidated pediatric block. Over the upcoming year we will be monitoring the Bootcamp's impact on learning given some students will experience quite a time gap between the bootcamp and their core pediatric rotations.

P4-07-60596

Preparing to teach: Psychiatry residents' journey to their role as teacher.

Linda Jones University of Dundee, **Mandy Esliger** Dalhousie University

Background/Purpose: Preparing residents for their role as teacher is essential to learner and patient education, meeting accreditation standards, supporting development of residents' teacher identity, improving job satisfaction and attitudes toward teaching, enriching patient care, and increasing the chances students will learn residents' professional behaviour and values. Limited literature exists regarding residents' perceived needs and how they inform resident-as-teacher programs. This study explored how a psychiatry departments' residents' experiences prepares them for their role as teacher.

Methods: In this phenomenologically informed study, psychiatry residents (grouped by postgraduate year) and education directors participated in separate semi-structured group interviews (one interview per group). Data were analyzed using Interpretative Phenomenological Analysis (IPA) to identify themes, then interpreted by the researchers to portray the residents' lived experiences.

Results: Ten residents and three education directors participated. Participants value the resident-as-teacher program deeming it prepares residents for their teaching role. Five themes capture the findings: residents' sense of self, conceptions of teaching, perceived student types, conceptions of feedback and impact of the learning environment. Despite valuing the program, participants suggested various improvements: increased observation of residents teaching, improved feedback on teaching skills, protected time for training and teaching opportunities and support across the department for the teacher role.

Conclusions: This study highlights the importance of fostering residents' educational skills to develop their teacher identity and prepare them for their teaching role. It provides insight on residents' perceived needs and how they can inform resident-as-teacher programs. Numerous recommendations are suggested for curricular improvements.

P4-08-60660

Rural Medicine eMentoring BC (RMeMBC)

Takaia Larsen Selkirk College

Background/Purpose: The RMeMBC program connects Rural Pre-Medicine Program (RPM) students at Selkirk College with medical students in the Rural Medicine Interest Group (RMIG) at UBC. Due to geographic barriers, it is difficult for rural students to find "near peer" mentors. Likewise, medical students interested in rural practice are often studying in urban settings and feel disconnected from rural communities. The RMeMBC program provides

a platform where these students can form mentoring relationships online.

Summary of innovation: In collaboration, RPM, RMIG and the Rural Education Action Plan (REAP) developed a curriculum of eight modules highlighting the transition from undergraduate studies to medical education training. Once mentoring matches have been made based on common interests and experiences, students access the curriculum through an eMentoring software platform, and it helps to guide their conversations.

Conclusions: Early results from the program indicate that mentors and mentees find the experience valuable. Interactions on the platform are generally focussed on the topics students identified as being important to them: the transition to medical education training and the needs of rural communities. One challenge which has presented itself is that portions of the curriculum are sometimes left unaddressed. Currently, we are exploring ways to encourage greater engagement with the curriculum while still allowing for organic conversations driven by participants' interests. Upon review, all partners view RMeMBC as successfully providing a resource that supports participants with rural backgrounds or affinities, and it could be replicated to support rural students across Canada.

Teaching & Learning with Technology

P5-02-60531

Dynamicity in response to COVID: Reconfiguring the infectious disease clinical skills sessions for preclinical medical students

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Background/Purpose: Responding to covid while maintaining a dynamic and relevant clinical skills curriculum was a challenge and impetus to be creative. At the American University of Beirut medical school, we already trained Medicine 1 students in universal precautions as part of their infectious disease (ID) block, in addition to ID-focused history-taking sessions. The challenge was how to A- implement these sessions virtually and B- make the content more relevant to the pandemic while maintaining the overall course learning objectives.

Summary of innovation: We instructed the students to record videos from home on hand washing, using ink or any colored materials (to ensure thoroughness), and using

their own wardrobe items to demonstrate the process of doning and doffing of personal protective equipment. We also replaced the two ID history-taking sessions with a session on tracing one's journey to the store and back to identify the surfaces one comes in directly contact with, and another session (teamwork-based) where the students had to make a presentation to convince government officials of the necessity to implement a country-wide lockdown, using arguments based on infection control and public health measures.

Conclusions: The output by the students was impressive and the teaching faculty's adaptation to the abrupt modification of the sessions was laudable. Thinking outside the box and taking bold steps proved rewarding and feasible. Additionally, more public health content should be integrated into clinical teaching to inculcate a more global understanding of health and disease.

P5-03-60923

Developing Interviewing and Clinical Reasoning Skills with a Novel Low-Cost Virtual Patient Simulator

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Background/Purpose: Good interview skills are crucial in medicine. Interview skills are usually taught and developed during clinical skills (CS) sessions in a group setting. Such settings can limit students' ability to access their own unique knowledge base and to reflect on their clinical reasoning patterns. More recently, there have been added restrictions to CS sessions, due to the COVID-19 pandemic, that further limit students in their access to standardized patients (SPs).

Summary of innovation: A low-cost virtual patient history-taking simulator operating in PowerPoint 2013 with custom Visual Basic programming was piloted during a Respiratory Exam session. The simulator mimicked a Jeopardy format, incorporated multimedia, and required no prior preparation by students. It was used by student dyads playing the role of interviewer and patient. Only the patient-student was able to see the computer screen and relied on the software to provide answers to questions asked. The program provided feedback to the interviewer-student regarding areas that should have been addressed but were missed. A post-intervention anchored Likert-scale survey was completed by 15 students (100% response rate) who used this software. Student responses indicated the software was of educational value (100%), a useful tool for practicing history-taking (86%), and an efficient use of their time during the session (93%).

Overall, 93% requested that this software be part of future CS sessions.

Conclusions: Students valued using this novel, low-cost, easy-to-use simulator to practice interviewing in an individual, guided manner, with immediate feedback, and without need for additional preceptor, SPs, or preparation. Additionally, the tool promotes individual expertise development while incorporating differential diagnosis, data interpretation, and management skills.

P5-05-60886

Learning analytics as a means to evaluate student collaboration and engagement

Craig Thompson University of British Columbia, **Patricia Gerber** University of British Columbia, **Kerry Wilbur** University of British Columbia, **Robert Pammett** University of British Columbia, **Morgan Garvin** University of British Columbia

Background/Purpose: Learning analytics refers to the collection, evaluation, and analysis of data about learners to understand and optimize the learning environment. Threadz is learning analytics software available at our institution that can be applied to our online course discussions to help us examine learners' contributions and interactions within our learning management system.

Summary of innovation: We explored the use of Threadz within online course discussions in the fourth-year distance-based Advanced Topics in Pharmacy Practice seminar course of the UBC Entry-to-Practice Doctor of Pharmacy Program. Learners configured in groups of 6-7 participated in online course discussions pertaining to topics related to current events and issues in pharmacy. We activated the software within the course learning management system and retrospectively generated visualizations to help us analyze learner engagement. We identified data that enables instructors to act in real-time course delivery to support teaching and learning. Quick identification of "orphan" discussion posts and indicators of low learner engagement (timing, quantity and connectedness of contributions) permit instructors to efficiently and purposefully intercede to assess content and concept understanding and offer guidance to specific learners.

Conclusions: Learning analytics software has the potential to transform the way we moderate and evaluate online course discussions, and should be considered for health professional educators who use this modality to educate students.

P5-06-59678

Evaluation of an on-line transgender health training program

Michael Lee-Poy McMaster University

Background/Purpose: TransEd is an online transgender health education curriculum developed to address the paucity of training in transgender health in healthcare professional schools. A study of six medical schools in Canada found that only two devoted more than eight hours of instruction to transgender related curriculum while the remaining allocated less than 4 hours of instruction. Self-reported comfort level showed that only 7% of students across Canadian medical schools actually felt "sufficiently knowledgeable" to assist a patient requesting hormonal therapy. TransEd is an innovative online curriculum that was developed through a grant from the Ministry of Training Colleges and Universities in 2015 to address this gap in education in medical training. This project looks at evaluating the effectiveness of an online TransEd program to address the knowledge gap, attitudes and comfort level in providing transgender healthcare.

Methods: This project used the Kirkpatrick's four levels of training framework which is considered a gold standard for evaluating training programs. A mixed-methods approach using surveys and focus groups was implemented. After completion of the TransEd modules, Family Medicine residents completed a survey addressing knowledge and attitudes on transgender health. In addition, a focus group with a experienced and trained facilitator conducted a small group guided session exploring TransEd's effectiveness in meeting educational needs, perceived gaps in the modules and effectiveness in increasing comfort level in addressing transgender healthcare needs.

Results: This abstract focuses on the qualitative analysis. A total of 6 Family Medicine residents participated in the focus groups. General themes that emerged including appreciating videos of true narratives that personalized the transgender journey and stories, a logical step wise approach to the modules, the practical approach to management options and the link to resources. Overall participants felt TransEd was a great foundation for transgender health knowledge and helped increase comfort levels. Suggestions for improvement included having more case examples that would model how to implement the guidelines in a practical manner and receiving ongoing training in these areas. Another

limitation identified was the ability to transfer this knowledge into real life situations and the need to pair TransEd with clinical exposures and experiences.

Conclusions: TransEd is an online education program that is an effective way to deliver curriculum on transgender health. Medical residents appreciated the practical approach that helped to increase their comfort levels in providing transgender care. However, pairing this with clinical rotations and experiences would further enhance the effectiveness of TransEd. Further research is needed to study the affect of TransEd on behavioural change in medical professionals providing transgender care.

Teaching & Learning - Postgraduate

P6-01-59487

Patient Emancipation? Patient Teacher Programs in Medical Education

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Background/Purpose: "Patient as Teacher" (PAT) educational initiatives aim to bring the human experience more prominently into the medical education process by integrating patients and their stories into teaching. Yet despite decades of PAT programs and related research, incongruent perspectives on patients' involvement and motivations can still complicate PAT efforts. The underlying reasons for patient engagement from the perspectives of all PAT stakeholders - particularly patients - requires further scrutiny to ensure meaningful, non-tokenistic PAT programs and avoid potential coercion.

Methods: A new Patient as Teachers program was launched in 2018 for undergraduate University of Toronto MD students doing their surgical clerkship. Using a phenomenographic approach, we conducted 21 semi-structures interviews with patient teachers, students and facilitators who participated in this program to investigate the qualitatively various ways the program (the phenomenon) was experienced.

Results: Analysis identified different phenomenographical categories of description and how these categories were structurally related. One category may explain why patients participate in medical educational programs: retroactive emancipation. The program offered a way for patients' to counterbalance the dehumanizing care experience parts, give voice and drive for a change in how healthcare engages with patients

Conclusions: As patient engagement in medical education increases, we should consider how to make patient involvement more inclusive and authentic. By conceptualizing PAT programs as potential early stage emancipation movements we may better support educational program development that involves patients in a more humanistic and ethically sound manner to promote true patient-centered healthcare.

P6-02-60826

Building a New Social Contract in Canadian Medical Practice through Competence by Design

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Background/Purpose: We examine the emerging social contract between doctors and society in the context of Competence by Design (CBD). Three seminal events define medical specialty training: the union of barber-surgeons and apothecaries in the 19th century (Porter, 2002); the Flexner Report (1910); and, competency-based education nowadays. Each event produced specific medical professional identities and associated social contracts based on understandings of population needs and rights. CBD promises to create scientifically informed and socially responsive doctors. CBD entails a new professionalism and a new social contract, but how is this reproduced in specialty training, which occurs in a dialogic relationship between clinical practice and social accountability?

Methods: We conducted a comprehensive literature search of competency-based medical education approaches, Competence-by-Design, and the sociological literature on social reproduction and education.

Results: We examined CBD through the vantage point of social reproduction theory providing tools to understand the roles of both education and practice in the re-making of professional worlds. Education is one key locus of social reproduction (Bourdieu, 1972; Freire, 1970), yet this is mediated by structural constraints in various forms (Collins, 2009), including contexts of practice.

Conclusions: We found that, beyond the parameters of scientific medicine, CBD creates a medical professional identity entangled with contemporary social and contextual factors, including pandemic conditions, thus creating a new social contract.

P6 - 03-59933-Teaching together: The impact of a faculty-resident co-teaching experience on resident teaching skills.

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Background/Purpose: A core feature of resident training is development of the role as teacher. To support this development our psychiatry department implemented an opportunity for residents to co-teach Med 2 clinical skills with a faculty member. The goal of this study was to explore resident and faculty perceptions of the impact of this co-teaching experience on resident teaching skills.

Methods: Faculty and residents at a single medical school who co-taught the 2019/2020 clinical skills teaching (n=12) were invited to participate in semi-structured group interviews (one for faculty, one for residents) post co-teaching experience. Transcripts were analyzed using inductive thematic analysis to identify themes. Residents also completed Likert scale self-assessment questionnaires pre- and post- co-teaching to gauge self-assessed impact of the experience on their teaching skills.

Results: Four faculty and three residents participated. Five themes were identified: Role-as-Teacher, Enjoyment, Perception of Feedback, Structure of Experience, and Teacher Identity. Participants indicated the experience fostered development of teacher identity, skill, and a perceived sense of confidence via role modelling and mentoring. Participants suggested more opportunities for observed teaching, improved feedback, and standardization of the co-teaching experience would be beneficial. Quantitative analysis of questionnaires showed improved perception of teaching skills although this increase was non-significant (t(2)= -0.8542, p= 0.4830).

Conclusions: Our findings suggest the co-teaching experience enhances resident teaching skills. Further enhancement may be realized by incorporating suggested improvements. Future studies should examine the co-teaching experience in a larger sample and feasibility of application more broadly.

P6 - 04-60814

Evaluating the Child and Adolescent Psychiatry sub-specialty program using a rapid-cycle approach

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Background/Purpose: Queen's University launched Competency-Based Medical Education (CBME) in July 2017. Due to the relatively small size of the Child and Adolescent program, the ability to iteratively respond to programmatic needs has been limited, primarily due to the lack of data. The purpose of this study is to evaluate the transition to CBME for the Child and Adolescent Psychiatry program at Queen's University.

Methods: The first cycle of this rapid evaluation was completed in November 2019. Residents, faculty, program leaders, allied health professionals, educational consultant (n=12) participated in a focus group or interview to understand experiences following CBME implementation and to identify areas for improvement. All data were analyzed thematically.

Results: Residents appreciated receiving timely feedback, identifying areas for improvement, and acknowledging efforts of program leaders. Program leaders identified the small and relatively new program as a challenge, often resulting in faculty serving multiple roles. Time commitment was identified as a concern across participants. Findings suggest ongoing refinement of assessment tools based on their feedback is appreciated and the competence committee is moving closer to implementing as intended. Areas of support included the educational consultant, CBME lead, and learning from faculty and residents who had experience with CBME. Areas for refinement included interpretation and alignment of the entrustment scale and clarification of CBME expectations.

Conclusions: The findings have identified what is working well following the transition to CBME and areas for program improvement. Despite the focus being on one program, the findings can inform the implementation of other CBME programs.

P6 - 05-60795

Evaluating the effectiveness of an airway mastery curriculum

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Background/Purpose: An airway mastery curriculum was developed to provide residents with the opportunity to

learn emergency airway management skills and was designed using a combination of Cognitive Load Theory (CLT), 4 Component Instructional Design (4CID), and a mastery approach. This course spanned across 1 year and included monthly modules, deliberate practice, and mental rehearsal. This program evaluation aimed to evaluate the effectiveness of the curriculum in preparing residents for emergency airway management in practice.

Methods: All 10 residents participated in a focus group (n = 7) or semi-structured interviews (n = 3) within 10 days of course completion to describe their experiences with the course and identify recommendations. Participants will be interviewed again once they have worked independently for six months. Data were analyzed thematically.

Results: All participants reported increased confidence in airway management following course completion. Four themes emerged: facilitators, challenges, recommendations, and transfer to practice. Facilitators included the course homework, schematic representations, and repetition. The challenges related to real-life practice and buy-in from non-course participants. Participants suggested standardization across instructors, additional practice outside of the course, and pediatric scenarios. Participants discussed an increased ability to prioritize and more planning before intubating resulting from the course. Multiple participants discussed how their skills became automatized allowing them to focus on other areas of care.

Conclusions: Findings emphasized the practicality of the course and identified areas for improvement. It is encouraging that all participants felt that the course was worthwhile and that it had improved their confidence in airway management.

P6-06-60942

Project-Managing the Poetry of Medicine: Structure and Meaning in an Accreditation and Quality Improvement Unit

Patricia Wade McGill, **Fernanda Claudio** McGill

Background/Purpose: Competence-Based Medical Education (CBME) poses new challenges for educational quality improvement and, ultimately, accreditation of residency programs. Medical education is multifaceted, complex, and includes intangibles relating to professional identity and delivery of high-quality responsive care that serves patient needs and satisfies health system structures. While CBME appears straightforward and self-explanatory, the model is challenged by context of

implementation (system) social reproduction of medicine (meaning).

Summary of innovation: The Office of Accreditation and Education Quality Improvement (OAEQI) adopted a team-based approach to support medical training in the context of diverse populations, the Quebec health system, medical education best-practice, and national accreditation standards. OAEQI functions through a tripartite service model that aligns curriculum, assessment and evaluation delivered through the lens of quality improvement and accountability in its various institutional and social dimensions. Our strength is our team. We are bilingual and demographically varied working collaboratively and deriving our expertise from psychology, medical anthropology, nursing, political science, education, medicine, and others. Our structure is enabling and humanistic in terms of work practice and deliverables. We illustrate this approach with a case study of a residency program.

Conclusions: Our multidisciplinary approach enables identification of complex educational needs, barriers, and opportunities. We design response models to address residency programs needs accounting for strengths and constraints, measures of outcomes and impacts, and feedback.

P6-07-60938

Learner suggestions on improving residency education

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Background/Purpose: The postgraduate Medical Education (PGME) office routinely gathers information about resident's experiences, strengths and suggested improvements as part of ongoing program evaluation. The purpose of this project was to review learner suggestions on improving residency education within our institution.

Methods: Exiting residents were asked to fill out an on-line reflective survey about their experiences and satisfaction about their training. Responses from 322 residents who completed their residency training in the 2014-2015, 2016-2017, 2017-2018, 2018-2019 and 2019-2020 academic years were complied. Qualitative responses from the question "how could your residency program be improved?" was imported into NVIVO 12. Emergent themes were generated as they appeared in the data, larger thematic areas were broken down into sub-themes if they were multi-faceted.

Results: Three overarching themes emerged: Resident learning, organizational, and resident wellness, each with various sub-themes. The majority of suggestions (74%) revolved around resident learning. The main sub-themes were suggestions on educational experiences (e.g., more procedures), the delivery of education (e.g., improved and focused teaching), and supervision and support. Other areas included exam support, transition to practice and scheduling. Organizational improvements (13% of comments) mainly revolved around resources (e.g., physical, financial, technical, human resources) and organizational communication. Finally, 10% of all comments were focused on resident wellness (e.g., improving wellness initiatives and addressing professionalism and harassment issues).

Conclusions: These results have helped in identifying key factors that influence the overall residency experience. Focusing organizational improvements on these factors will help improve the ability of PGME to deliver high quality resident training.

Teaching & Learning

P7-01-60824

Rethinking Certainty - how to teach 'evidence based' patient care when there is no evidence?

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Background/Purpose: The Covid-19 pandemic has fundamentally upended our reliance on Evidence Based Medicine (EBM) based on Randomised Controlled Trials (RCT's) leaving clinicians to adjust to practicing medicine when there is no evidence. Also, the necessary switch to creating evidence through 'fast-tracking' research into therapeutic improvisation based on anecdotes is profoundly upsetting to practitioners who have been able to rely on EBM as the foundation of clinical decision making. This issue has been described as a 'Bayesian fatigue' (Rosenquist (2020); 'a stress-induced dysphoria experienced' caused when 'knowledge acquired over decades…becomes less important than information being gathered from disparate sources in real-time'. Yet whilst 'Trust me I'm an expert' is a valuable therapeutic tool how do clinicians use it effectively when the foundation of that expertise has been shaken to its core? This presentation will explore how we can enable our students to develop the skills to cope with this 'Bayesian dysphoria' when practicing in a more complicated clinical environment than we could ever have imagined

Summary of innovation: The established way to review cases is in Clinical Case conferences. To address Bayesian fatigue students must be able to review clinical cases using critical reflection and analysis based on expressing the 'hunches' and 'best guesses' that are part of clinical decision making. Teaching these critical reflection skills is now a key part of the Masters in Medical Education at Dundee so our student educators can embed this into all clinical teaching

Conclusions: The Covid-19 pandemic has shown that reliance on EBM is a false premise and as educators we must enable students to critically reflect and express the underlying reasons for their 'best guess' clinical decisions

P7 - 02-60932

Improv Bot - a web-based AI chatbot to improve communication skills

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Background/Purpose: ImprovBot.ca is a web application co-constructed by graduate students at the Centre for Digital Media and the Faculty of Medicine in Vancouver. The A.I. bot continues ongoing iterative development at the UBC Faculty of Medicine's HIVE. Effective communication relies on both listening skills and positive responses. The need to have multiple opportunities to practice communication skills is a challenge that programs in the areas of health and life sciences constantly attempt to improve. Learners benefit from increased training of their professional communication abilities, yet often the time devoted to practice is scarce and there may be barriers to experimenting in front of peers. By the time learners undertake clinical practice they may be under prepared and have to fend for themselves working with broad and often prescribed text book guidelines.

Summary of innovation: For this reason, an artificial speaking agent, a chatbot was designed that afforded learners persistent and regular opportunities to practice a growing vocabulary of communication skills. Learners are challenged to respond to chatbot prompts spontaneously through a series of games to improve their listening skills

and respond to offers with a "Yes, and" mindset. The Yes And, Repeat After Me, and a third Free Talk mode allow users to interact with our A.I. chatbot through recordable conversations that can be saved, sent, and replayed by peers or teachers. Additional scenarios are focused on clinical communication skills as they relate to critical care and family practice.

Conclusions: The ImprovBot is a scalable innovation that is currently undergoing further development to improve machine learning algorithms and expand the repertoire of activities in order to enrichen the learner experience and provide multiple opportunities to exercise their communication skills.

P7-03-59634

Développement du rôle d'éducateur des étudiants en médecine dans un programme fondé sur une approche par compétence.

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Background/Purpose: Le rôle d'éducateur fait partie intégrante de la pratique médicale dès le début de la résidence. Il se traduit par des activités de supervision, de présentations ou autres types d'activités de formation auprès des collègues et autres intervenants. Ce rôle intègre plusieurs compétences CanMeds, notamment la communication, la collaboration, l'érudition, et l'expertise. L'apprentissage de cette compétence est souvent implicite ou informel dans les curriculum pré-doctoraux. Dans le cadre de la refonte du programme de médecine, nous avons construit des activités pédagogiques intégrées et longitudinales soutenant le développement du rôle d'éducateur.

Summary of innovation: Les activités pédagogiques sont déployées tout au long des quatre années du programme et préparent les étudiants à agir dans ces trois principaux contextes en lien avec leur rôle d'éducateur: 1. Le partage des connaissances en petits groupes, 2. La présentation efficace en milieu clinique, 3. L'apprentissage et la supervision en milieu clinique. Chacune de ces activités visent l'acquisition de connaissances, leur intégration dans des activités pratiques en situation réelles et le développement de la pratique réflexive. Les acquisitions sont supportées par des méthodes pédagogiques

interactives centrées sur l'apprenant. L'évaluation est fondée sur des examens écrits et sur l'observation directe.

Conclusions: Le développement du rôle d'éducateur s'est concrétisé dans des activités pédagogiques dédiées rendant explicites les apprentissages sous-jacents. La pertinence de ces activités pour la pratique future est soulignée par les professeurs impliqués. L'intégration des compétences de collaboration et de communication est particulièrement appréciée des étudiants.

P7-04-60035

Development of interprofessional health education programs in two academic family medicine practices: Moving towards the Patients Medical Home

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Background/Purpose: Models of collaborative team-based care, such as the patient's medical home, are the vision for primary care in Canada. Yet, opportunities for the development of interprofessional competencies necessary for the implementation of these models can only be found in acute care settings. Two family medicine clinics, one in St. John's and the other in Halifax, have created pilot projects to integrate students from a variety of health disciplines into such primary care models.

Summary of innovation: Novel interprofessional opportunities were developed through Memorial University and Dalhousie University. Learners from pharmacy, nursing, medicine, social work, occupational therapy and physiotherapy participated in a Memorial University Family Medicine Clinic between July 2018 and January 2020. Learners from occupational therapy and physiotherapy participated in two Dalhousie family medicine clinics from July - September 2020. Students engaged with learners in other health disciplines in primary care, fostering role clarification, team functioning, collaborative leadership and team conflict skills.

Conclusions: When surveyed, students revealed that the team approach provides a supportive and collaborative learning environment. Feedback revealed faculty and learners gained knowledge, skills and understanding of scope of practice of OT and PT health professionals. Patients appreciated the efficiency of access to allied

health professionals in and through the clinic. These provincial initiatives provide a foundation for interprofessional learning and innovation in care delivery within family medicine. Partnerships across academic health education programs, medical schools and primary care clinics have the capacity to advance sustainable clinical learning opportunities, improve patient care outcomes, and authenticate the delivery of collaborative interprofessional care.

P7 - 06-60890

Identifying Correlations in National Match Results

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Background/Purpose: One of the most public outcomes for a MD program is the number of unmatched students each year. We wanted to explore if the percentage of students matching to the same institution they graduated from had a relationship with the unmatched percentage. Additionally, to explore if the percentage of graduates with Family Medicine as a first choice had a strong relationship with lower unmatched rates.

Methods: Data was gathered from the CaRMS website R1 first round data 2015 to 2019 (n=85). (https://www.carms.ca/data-reports/r1-data-reports/) and analyzed with SPSS 25. Aggregating Table 42 allows us to report on national match percentages for students who stay in the same institution.

Results: There is a suggested relationship between Family Medicine as a first choice discipline (%) and unmatched students by school of graduation (%) (Pearson Correlation of -.339) . There was no relationship between percentage of students staying in the same institution and percentage of unmatched students (Pearson Correlation of .128) There was a strong negative correlation between the of percentage students staying at the same institution and the percentage matching to their top rank discipline (Pearson Correlation of -.503).

Conclusions: Although there is only a small proportion of CaRMS data available for schools to understand their graduating classes match result, there is some evidence that indicates a high local match rate is not a definitive solution for a match with a high first choice discipline result. It would be enlightening if CaRMS would release the rank order of schools of residency by school of graduation.

P7 - 07-60940

Rural Longitudinal Integrated Clerkship: An answer to increasing numbers of graduates choosing family medicine & rural practice locations

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Background/Purpose: Canada's rural populations are dramatically underserved by family physicians and family medicine practices, and traditional medical education practices appear to exasperate this problem by funneling the majority of graduates into urban specialty practice. Rural longitudinal integrated clerkships may be one way of improving this situation. To determine the outcomes of the ICC in regards to current practice locations and final career choice as compared to the Rotation Based Clerkship (RBC). The Rural Integrated Community Clerkship (ICC) is a core year-long 3rd year clerkship with students based in a community family practice learning the core disciplines of medicine in an integrated fashion following patients through the multiple venues for care in their rural community.

Methods: Using the U of A graduation lists from 2009-2016 and public medical profession databases, current practice locations and final career choice for all graduates were compiled.

Results: The total number of graduates is 1135 (1003 RBC and 132 ICC). Current practice location is as follows: RBC = 87% in urban and 13% in rural communities; ICC = 55% in urban and 45% in rural communities. Career choices of these graduates are: RBC: 41% in Family Medicine and 59% in various specialties; ICC: 73% in Family Medicine and 27% in various specialties. Urban origin ICC students are 4x more likely to be in rural family medical practice than urban origin students who did the RBC. Rural origin ICC students are 2.4x more likely to be in rural family medicine practice than those who did RBC.

Conclusions: Rural longitudinal integrated clerkships are an important initiative through which socially accountable medical schools can better serve their rural communities.