Canadian Conference on Medical Education 2022 abstracts
Les résumés de la Conférence canadienne sur l'éducation médicale 2022

Table of Contents

OA: April 24, 2022, 10:00 MST

OA 1 Black health & wellness / admissions

Glen 201 – CTCC

OA 1-1

69198

L'admission et la poursuite des études médicales par les étudiants noirs : les barrières et les facilitateurs

Salomon Fotsing University of Ottawa, **Angelina Tohme** University of Ottawa, **Gaelle Bekolo** University of Ottawa, **Johanne Mathieu** Université de Sherbrooke, **Harneet Cheema** University of Ottawa

Background/Purpose : Au Canada, les facultés de médecine prônent l'équité, la diversité et l'inclusion dans leurs mandats. Cependant, on note que les minorités ethniques notamment noires restent sous représentées dans les effectifs d'admission. Cette discordance génère plusieurs questionnements quant à la concrétisation de ces notions dans leur processus d'admission ainsi que leur degré d'intégration au sein des facultés. Ce projet visait à identifier les facteurs influençant l'admission en médecine et la poursuite des études médicales par les minorités ethniques.

Methods : Recher che systématique et analyse narrative des écrits provenant des bases de données Medline (PubMed), PsycINFO, CINAHL, Education source, Eric et Google Scholar. 152 documents en anglais publiés entre 1994 et 2021 ont été répertoriés et traités dans les logiciels Zotero et Covidence. 45 articles ont été retenus et analysés.

Results : Sur les 45 articles analysés, 34 (75,5%) traitent de ce sujet chez des étudiants noirs. Seul 1 article se rapporte au contexte canadien. Les barrières identifiées incluent : le mentorat inadapté, une préparation académique inadéquate, les stéréotypes et le syndrome de l'imposteur, le manque de finances et de connaissances préalables sur le métier de médecin. Les facilitateurs identifiés incluent : des programmes visant à augmenter la diversité en médecine, des programmes de mentorat offrant une exposition et sensibilisation précoce à la profession, du soutien financier et du support académique.

Conclusion : Ils existent plusieurs barrières et facilitateurs à l'éducation médicale pour les minorités ethniques, plus particulièrement noires. Davantage de recherches canadiennes à ce sujet permettraient de mieux cerner cette problématique à l'échelle nationale.

OA 1-2

68160

Fit-For-Purpose: a Customized, Innovative, Mixed Methods Online Admission Interview for Integrated Intrinsic Attributes

Debra Sibbald University of Toronto, **Andrea Sweezey** University of Toronto

Background/Purpose: Measuring interdependent, intrinsic attributes via interviews is challenging, and further confronted by pandemic restrictions. This study examined appropriateness of a mixed methods asynchronous online recorded interview combining blueprinted, validated, weighted assessments to discriminate between large numbers of admission applications.

Methods: The instrument assessed intrinsic attributes in Pharmacy applicants (N=608) using 10 recorded verbal responses; a written passage response and multiple-choice questions. In verbal recordings, applicants responded to objective and reflective questions related to challenging, standardized scenarios assessing interpersonal, cognitive and decision-making skills. The written passage addressed attributes and English skills. Trained expert/non-expert assessors evaluated responses using global ratings, noting red flag performances. MCQs measured attributes and English comprehension. Applicant results were compared to pre-launch (2nd, 3rd, and 4th year students) and concurrent pilots (1st year students; recent graduates). The conjunctive pass score combined weighted cut scores for each component. Interview scores were merged with academic GPA scores to determine and rank acceptable applicants.

Results: All three formats showed appropriate means, and discrimination individually and when combined in a weighted average. Reliability coefficients were acceptable (written- α, ω = 0.9; verbal- α, ω = 0.70). Verbal responses performed well independently (p <0.001) and contributed positively to overall results. Unprofessional behaviours were infrequent, in applicants who also received lower scores. Assessor and applicant survey feedback was positive.

Conclusion: The design was effective as an online admission screening instrument, discriminated well between applicants with an acceptable pass rate, providing evidence of integrated competencies derived through multiple measures and perspectives.

OA 1-3-

69245

Enhancing Equity through Implicit Bias Recognition and Management in Medical School Admissions

Khadija Ahmed Western University, **Tisha Joy** Western University, **Javeed Sukhera** MD, PhD, FRCPC, Chair/Chief of Psychiatry, Hartford Hospital

Background/Purpose: Addressing issues relating to equity, diversity, and inclusion (EDI) is essential for medical school admissions processes. Admissions members have an important role and influence in admissions decisions, yet are prone to implicit biases that can impact EDI efforts. As such, implicit bias training has been an integral part of admissions processes at many universities. Therefore, to inform admissions training guidelines, our study sought to explore how key players within the medical admissions process identify and integrate feedback about their implicit biases.

Methods: Utilizing constructivist grounded theory methodology, we conducted semi-structured interviews with admissions stakeholders (faculty, learners, and community members) (n=21) at Schulich School of Medicine and Dentistry (Western University, London, Canada) who had participated in group-based implicit bias training in the previous admissions cycle. The online implicit association test was used as an elicitation prompt to encourage self-reflection of potential biases, the influence of bias in admissions, and methods to mitigate these biases.

Results: Participants were largely unaware of their implicit biases, yet acknowledged that these biases may influence their decisions. Biases often related to in-group affinity towards similar applicants. Participants felt that sensitive conversations and platforms for discussion about the intersection of identity and affinity were needed, alongside a more individualized approach to training.

Conclusion: Improving our knowledge and training around implicit bias in the context of medical admissions is a key component of enhancing

equity. Our study suggests that implicit bias training is short-lived and advancing EDI in admissions may require more individualized training and preparation.

OA 1-4

69356

[Addressing Financial and Social Barriers and Increasing Confidence Amongst Underrepresented Minority Medical School Applicants on CASPer During COVID-19](#)

Julianah Oguntala University of Toronto, **Claudine Henoud** University of Ottawa, **Libny Pierre-Loius** University of Ottawa, **Asli Fuad** University of Ottawa, **Farhan Mahmood** University of Ottawa, **Claudine Henoud** University of Ottawa, **Ike Okafor** University of Toronto

Background/Purpose: Computer-based Assessment for Sampling Personal Characteristics (CASPer) is used by many medical schools to assess the non-academic competencies of applicants. With the advent of COVID-19, CASPer Snapshot was introduced for admissions committees to learn more about their applicants, pre-interview. Performance on CASPer can be enhanced by coaching and mentorship, which Underrepresented Minorities in Medicine (URMMs) often lack when applying to medical schools.

Summary of the Innovation: The CASPer Prep Program (CPP) was developed in 2019 by medical students from the University of Ottawa in conjunction with the University of Toronto's Community of Support program. CPP is a free, online 4-week program led by medical students featuring access to a medical ethics book, feedback during class, homework review, and a mock exam. In 2021, CPP implemented curricula for the CASPer Snapshot and CanMEDS roles, and over 320 URMMs applicants were supported. We hoped to increase students' confidence and competency for the CASPer Snapshot and their understanding of CanMEDS roles. We also aimed to relieve the financial burden of applying to medical school during the COVID-19 pandemic.

Conclusion: From pre and post-program questionnaires (n=126, 60, respectively) completed by the students, there was a significant increase in the URMM's knowledge about the CASPer Snapshot, and in their confidence in understanding most CanMEDS roles. The majority of respondents strongly agreed or agreed that CPP relieves students of the financial burden and enables students to access mentors during the pandemic. Our program successfully addresses the socioeconomic obstacles faced by URMMSs applicants in their pursuit of medical school.

OA 1-5

69368

[Upstream Effects of Medical School Admission Policies on Medical Aspirants: Insights from the Coalition of Canadian Undergraduate Health Programs](#)

Stacey Ritz McMaster University, **Sarah Wells** Dalhousie University, **Robb Travers** Wilfrid Laurier University, **Martin Holcik** Carleton University, **Michael Adams** Queen's University, **Barbara Ravel** Laurentian University, **Louise Winn** Queen's University, **Otto Sanchez** Ontario Tech University, **Mark Nachtigal** University of Manitoba, **Ebba Kurz** University of Calgary, **Diane Williams** University of Waterloo

Background/Purpose: In the competitive admissions landscape for Canadian medical schools, aspirants to medicine are often highly strategic about crafting an admission profile to maximize their chances of acceptance. Academic leaders of undergraduate health programs in Canada have considerable insight into how aspirants respond to the admissions policies of medical schools, and the impacts these have at the level of the individual and the program.

Methods: Members of the Coalition of Canadian Undergraduate Health Programs (comprised of the academic leaders of these programs) were asked for their observations and insights about how students in their programs respond to medical school admissions policies, and common themes and areas of heightened concern were identified.

Results: CCUHP leaders identified a variety of upstream effects of medical school admissions policies, including: heightened levels of student focus on and distress about grades; course selection oriented to maximizing GPA or to ensure eligibility for admission to all medical schools (e.g., organic chemistry); maladaptive competitiveness, reduced collaboration and breaches of academic integrity; intense investment in extracurricular activities and MCAT preparation; and reluctance to take reduced course loads even during health or personal crises.

Conclusion: CCUHP members reported a significant number of upstream consequences of medical school admissions policies on aspirants including adverse effects on individual behaviour and program cultures that might incentivize activities that are actually at odds with the broad goals of medical school recruitment. These observations can help to inform the ongoing evolution of admissions policies and serve as the basis for further research on this topic.

OA 1-6

69393

[Eliminating Financial Barriers For Medical School Applicants](#)

Ololade Ogunsuyi Georgetown University, **Amira Abdalla** Ohio State University, **Claudine Henoud** University of Ottawa, **Maisoon Yousif** Dalhousie University, **Chantal Phillips** University of Toronto, **Justin Lam** University of Toronto, **Farhan Mahmood** University of Ottawa, **Tobi Olaiya** McMaster University, **Ike Okafor** University of Toronto, **Mark D. Hanson** University of Toronto

Background/Purpose: Canadian medical schools are focusing on socioeconomic diversity as a part of equity, diversity, and inclusion efforts. An important financial barrier to achieving representation are costs of the medical school application process. Financial barriers include completing the Medical College Admissions Test (MCAT), which can average $3000 per year, as well as medical school application fees. Strategies coordinated across medical schools to address these barriers are lacking. The Price of a Dream (POD) is a medical trainee, staff, and faculty advocacy group focused on developing coordinated approaches to socioeconomic diversity to fill this gap and decrease application costs for applicants in financial need.

Summary of the Innovation: POD, in collaboration with the Association of Faculties of Medicine of Canada (AFMC), the Council of Ontario Faculties of Medicine (COFM) and the Ontario Universities' Application Centre (OUAC) implemented two programs to address these barriers. The MCAT Fee Assistance Program (FAP) was started by the AFMC in 2018. The FAP offers eligible applicants free MCAT preparation and reduced scheduling, rescheduling, and cancellation rates. In 2020, POD implemented a national FAP outreach strategy to increase its accessibility. In the 2021-2022 application cycle, POD also collaboratively implemented the provincial Ontario Medical School Application Fee Waiver (OMSAFW) program. The OMSAFW program offers eligible applicants $600 of financial support for Ontario medical school application fees.

Conclusion: POD's MCAT FAP outreach strategy resulted in a 39.1% and 45.5% increase in applications and awardees respectively compared to the previous year. The OMSAFW program had 193 completed applications, and 150 applicants received the fee waiver.

OA 2: Residency

Glen 202 – CTCC

OA 2-1

68971

[The Top Ten Percent: A Rhetorical Analysis of Letters of Recommendation for Resident Selection](#)

Christen Rachul University of Manitoba, **Benjamin Collins** University of Manitoba, **Nancy Porhownik** University of Manitoba, **William Fleisher** University of Manitoba

Background/Purpose: Letters of recommendation (LORs) play an important role in resident selection yet writers receive little guidance on writing effective LORs and selection committees struggle to decipher LORs so that they can fairly assess and select applicants. The purpose of our study was to identify common patterns in the content, structure, and language of LORs and link these patterns to the social context of the Canadian resident selection process.

Methods: We conducted a type of discourse analysis called genre analysis on a corpus of 87 LORs submitted for applicants who successfully matched to a Canadian residency training program. We analyzed the LORs by identifying rhetorical moves, which are units of discourse that perform a coherent communicative function, and the rhetorical and linguistic strategies that realize these moves. Using findings from a prior study that explored the social context of LORs, we linked the identified patterns to social practices in the same setting.

Results: We identified a clear pattern in the structure and content of effective LORs, which highlighted the interpersonal qualities of applicants. We also identified key rhetorical and linguistic strategies that writers use to establish the credibility of the LOR and demonstrate the quality and suitability of the applicant for a training program.

Conclusion: Our findings highlight the specific LOR features that contribute to effective LORs. These findings can enhance faculty development initiatives aimed at writing LORs and also serve as a basis for developing more consistent and meaningful approaches to assessing LORs for more equitable selection of residents.

OA 2-2

69027

[CANPREPP - Canada's Portal for Resident Program Promotion: A Collaborative Canadian Innovation](#)

Victor Do University of Toronto, **Melanie Lewis** University of Alberta, **Preston Smith** University of Saskatchewan, **Geneviève Moineau** The Association of Faculties of Medicine of Canada

Background/Purpose: COVID-19 led to significant disruption of the Canadian R1 residency matching process. In response to the need to transition to virtual interviews and cancel visiting electives for the 2021 cohort, the Association of Faculties of Medicine of Canada (AFMC) led an urgent, collaborative change management process to ensure the R1 match would be optimally executed. Core principles of learner engagement and equity were applied throughout. Faculty and student leaders worked together to find a way to help students connect to programs and that residency programs have equitable access to students

Summary of the Innovation: CANPREPP - Canada's Portal for Resident Program Promotion was an innovative solution developed and officially launched in November 2020 for the 2021 match cycle. This initial version had a centralized residency program promotion events calendar as well as pages dedicated to each residency program which included a plethora of program information. As of June 2021, CANPREPP saw active engagement from 469/517 (91%) R1-entry residency programs across Canada. In total,

CANPREPP saw over 20,000 site visits from launch to end of the R1 match cycle. In January and February 2021 alone, CANPREPP had over 7000 site visits. During peak periods, site visit durations were approximately 13 minutes.

Conclusion: The CANPREPP tool filled an important void for students and programs in 2021. Initial feedback from users has been very positive and led to enhancements for the 2022 version. Further evaluation is underway to understand the impact of the tool on student program selection and career decision making.

OA 2-3

69234

[Residents as People - The Role Academic Half Day Plays in Building Community](#)

Gabrielle Hayduk-Costa Dalhousie University, **Sarah Burm** Dalhousie University

Background/Purpose: Residents in post-graduate medical education have dedicated learning time, often in the form of a weekly Academic Half Day (AHD). Despite being mandated by national accreditation standards, minimal guidance is provided regarding the format, content, and explicit purpose of AHD. Seeking to better understand this core component of resident training, we studied residents' perceptions of and participation in AHD.

Methods: Case study methodology guided data collection and analysis. Canadian Physical Medicine & Rehabilitation (PMR) residents' engagement in AHD was the educational context we defined as our case. Semi-structured interviews were conducted with thirteen residents across eight schools. Interview transcripts were analyzed using an inductive coding approach.

Results: While residents were asked about the educational value of AHD, they invariably spoke to its social benefits. AHD allowed residents to build community and foster a sense of connectedness with their peers. This was particularly valuable for junior residents as they navigated early challenging experiences within residency, and who otherwise felt disconnected from their program. Relationship to vocation, including establishing social and behavioural norms of the profession, was reinforced during AHD. To a lesser extent, AHD improved relationships with staff physicians.

Conclusion: For PMR residents, AHD serves an important role in cultivating a sense of kinship, camaraderie, and connectedness with peers, with staff physicians, and to vocation. These findings together highlight the resident as first, a person.

OA 2-4

69547

[Quantifying variance in patient care provided by family physicians as attributed to their residency program training.](#)

Kathleen Moncrieff University of Calgary, **Keith Wycliffe-Jones** University of Calgary, **Stephanie Garies** University of Calgary, **Boglarka Soos** University of Calgary

Background/Purpose: The shift to competency-based frameworks for medical education was intended to enhance the clinical performance of graduates once in practice, but it is challenging to measure the degree to which performance can be attributed to the quality of training. Our goal was to examine variation in quality-of-care outcomes as a function of family physicians' postgraduate training programs.

Methods: The following evidence-based quality indicators were defined using patient data from electronic medical records collected from

participating family physicians in Alberta who contribute to the Canadian Primary Care Sentinel Surveillance Network and compared across self-reported location of family medicine postgraduate training (Universities of Calgary, Alberta, or Other), along with demographic characteristics. 1. Blood pressure within target for hypertension patients 2. Serum lipid estimation 3. Thyroid stimulating hormone monitoring for hypothyroid patients 4. Chronic kidney disease screening for diabetes patients 5. Initiation of statin in high cardiovascular disease risk patients.

Results: 70 Alberta family physicians participated (27 University of Calgary graduates, 22 University of Alberta graduates, 21 graduates of other programs). There were no significant differences among the three groups in quality-of-care outcomes on 4/5 metrics. For thyroid hormone monitoring, graduates of the University of Alberta had significantly higher outcomes than the other groups.

Conclusion: This study shows that quality-of -care indicators can be used to measure outcomes of postgraduate training and could be replicated in other jurisdictions. Programs could use this method to compare their graduates' outcomes with others to identify strengths and areas for improvement in their curricula.

OA 2-5

69622

[The Graduate Diploma Professional Masters of Medical Sciences (GDPM): Enhancing Success of International Medical Graduates' (IMGs) Entry into Postgraduate Residency in Canada](#)

Andrea Winthrop Queen's University, **Michael Blennerhassett** Queen's University, **Jolene McLean** Queen's University, **Ross Walker** Queen's University, **James Reynolds** Queen's University, **Karen Schultz** Queen's University

Background/Purpose: IMGs are an underutilized skilled healthcare resource, having limited paths to licensure. Most must complete a postgraduate residency, but the CaRMS match rate for IMGs is less than 30%. The GDPM program is a unique graduate degree created by the Faculty of Health Sciences to provide CaRMS eligible IMGs the opportunity to further develop their clinical and research skills in the context of the Canadian healthcare system, with the aim to improving their success in matching to a postgraduate residency.

Summary of the Innovation: Students enrol in the Diploma (GD) or Masters (PM) program. All students take a course in research methodology emphasizing professional communication, critical appraisal, and foundational aspects of research, culminating in a research proposal. Masters students progress to completion of a research project. Both groups engage in integrated clinical courses providing clinical placements in a variety of disciplines, CanMEDS seminars, and simulation-based clinical and procedural skills training.

Conclusion: The program has enrolled 45 students from 5 continents, with 7 currently in the program (22 GD, 23 PM). The mean number of years since medical school graduation was 7 (range 0-22 years). All students accepted had recency of clinical experience. Only one student did not apply to CaRMS, whereas 27/33 (82%) matched through CaRMS, and 4 leveraged participation in the program to enter practice readiness programs as an alternative path to licensure (Family Medicine 22, other disciplines 9). The GDPM program significantly improves the CaRMS match success for IMGs, providing increased opportunities for these physicians to contribute to Canada's healthcare system.

OA 2-6

69682

[Judgement Day- Exploring the long-term implications of an unsuccessful or disappointing residency match.](#)

Owais Mian University of Ottawa, **Timothy J. Wood** University of Ottawa, **Katherine Scowcroft** University of Ottawa, **Samantha Halman** University of Ottawa, **Taryn S.M. Taylor** Western University, **Kori A. LaDonna** University of Ottawa

Background/Purpose: In 2021, 370 Canadian medical students eligible for the Canadian Resident Matching Service (CaRMS) either did not match to their preferred program or did not match at all. The consequences of a disappointing match are wide-ranging and potentially long-lasting, yet we know little about how this experience affects individuals once they enter residency and transition into independent practice. Therefore, our objective is to understand the long-term impact of a disappointing match, and what, if any, effects this experience has on well-being.

Methods: 8 faculty and residents participated in semi-structured interviews. Constructivist grounded theory informed the iterative data collection and analysis process.

Results: Although match results were initially upsetting, participants described feeling satisfied with their alternate career path. Family support and optimism appeared to facilitate coping. However, feelings of embarrassment lingered, and participants worried they'd be perceived as less competent if faculty supervisors or peers knew about their initial match outcome. Participants required support, yet fear of disclosure made them reluctant to seek it within their training programs or clinical departments.

Conclusion: Most attention is focused on preparing trainees for CaRMS, not on helping individuals navigate a process that, for many, may trigger career-long feelings of shame. Our findings reveal an under-explored dimension impacting well-being, suggesting that trainees and faculty may be struggling in ways that are not readily apparent. Since help-seeking may feel taboo, program directors and department leaders should be proactive about both cultivating a compassionate professional culture and facilitating meaningful wellness supports that extend beyond match day.

OA 3 - Black health & wellness / EDI

Glen 203 – CTCC

OA 3-1

68787

[Juggling legibility: Illuminating experiences of Black and Latinx women with disabilities in medical school](#)

Neera Jain University of British Columbia

Background/Purpose: Research into disabled students' experiences has illuminated persistent barriers to medical education. However, this work lacks substantive engagement with intersectionality frameworks. Research from other fields demonstrates that racism and ableism are connected, with nuanced implications at their intersection. This paper attends to this concerning gap by exploring disabled Black and Latinx women's experiences in medical education.

Methods: As part of a constructivist grounded theory study of disability inclusion at four U.S. medical schools, I will present a focused analysis of semi-structured interviews with 7 Black and Latinx students from three schools. I engaged multi-level inductive coding and constant comparison to theorize student experiences. Using abduction, I relate my analysis to extant theories of race and disability.

Results: Students contended with intertwined forces of racism and ableism, amplified in the high-performance medical education context.

Because their disabilities were largely less visible, their racialized identities were foregrounded. Student interactions with disability-inclusion systems were hampered by anticipated racial bias. Yet, those participants with a critical-race consciousness often recognized the 'social constructedness' of their disability experiences, fueling a critical-disability consciousness. This perspective prompted peer community-building and collective pursuit of change.

Conclusion: Understanding Black and Latinx disabled-student experiences is critical to dismantling racism and ableism in medical education. Making visible prevalent yet hidden barriers illuminates potential structural and practice changes that can account for those most impacted by marginalizing systems. Including disability in examinations of racism in medicine, and vice versa, is necessary to enrich our understanding of each, and to build a conjoined anti-racist and anti-ableist future.

OA 3-2

69125

MCAT CARS Companion: A novel approach to building reading comprehension and analysis skills in underrepresented pre-medical students

Jane Zhu University of Toronto, **Ming Li** University of Toronto, **Michelle McFarlane** University of Toronto, **Thrmiga Sathiyamoorthy** University of Toronto, **Joshua Tuazon** University of Toronto, **Marcus Law** University of Toronto, **Ike Okafor** University of Toronto

Background/Purpose: The MCAT Critical Analysis and Reasoning Skills (CARS) section assesses critical thinking in humanities and social sciences topics. Students who identify as underrepresented minorities in medicine (URMMs) have shown to score lower on CARS, due to barriers such as disadvantaged educational backgrounds, lack of guidance in preparing for medical school, and lack of experience with humanities and social science topics. In order to improve access to humanities and social science concepts in URMM populations, we designed and implemented a discussion-based course to help URMMs develop topic familiarity and foundational reading comprehension and analysis skills to succeed on MCAT CARS.

Summary of the Innovation: We designed and delivered a free online 8-week course using diverse literary excerpts across the humanities and social sciences. A mixed pedagogical approach with a didactic component and a focus on student-led discussion was used. Pre- and post-course questionnaires were administered to assess learning objectives and course outcomes. Thirty URMM students participated in the course. Post-course survey data showed increased familiarity and confidence with reading comprehension and analysis skills within humanities and social sciences. After the course, most participants reported having access to the medical student community compared to before (p <0.05).

Conclusion: This reading comprehension and critical analysis course led to self-reported increases in topic familiarity and reading comprehension and analysis skills within humanities and social sciences. The content and discussion-based format of our course provided a unique opportunity for URMMs to build connections with medical students and foundational reading skills for the MCAT CARS.

OA 3-3

69355

Shaping Social Media: Who are The Top Twitter Influencers of the Canadian Medical Community?

Thibacg Sivayoganathan Western University, **Amrit Kirpalani** Western University

Background/Purpose: Twitter can shape online discourse in healthcare. We aimed to characterize Twitter influencers in Canada in the following domains: healthcare, medical research, and health policy.

Methods: We used Right Relevance Insight to identify Twitter influencers through normalized influencer scores based on an algorithm of user connections and engagement in each domain. We used Facial recognition software (Kairos) to approximate sex and white or non-white race. We collected demographics through Twitter, institutional websites, SCOPUS, and LinkedIn, and we analyzed data with student's t-test and ANOVA.

Results: We identified 74 and 30 accounts as Twitter influencers in healthcare and medical research respectively with no difference in influence scores between males and females, nor white and non-white users. Within health policy, we identified 152 top Twitter influencers, and males (n=80) had significantly higher influencer scores than females (64.92±7.84 vs.60.77 ±6.19, P <0.05). Most (129/152) health policy influencers were white, though influencer scores were similar to non-white users. Within health policy, academic-affiliated users had significantly higher influencer scores than non-academic users (64.37±7.64vs.61.37 ±6.89, P<0.05), however there was no difference in academic vs non-academic user influence in healthcare or medical research.

Conclusion: We identified no sex- or race-associated disparity in user influence in healthcare or medical research, though males predominate in health policy. Academic affiliation did not correlate with influence in healthcare or medical research. Given the power of Twitter as a communication tool, future studies should evaluate factors shaping user influence in healthcare, with a specific focus on equity, diversity, and trustworthiness.

OA 3-4

69422

Diversity in Medical Education (DiME): Student Perceptions for Enhancing Diversity in Undergraduate Medical Education

Jamie Forman University of Manitoba, **Annie Jafri** University of Manitoba, **Paulina Nedjadrasul** University of Manitoba, **Annie Jafri** University of Manitoba, **Jackie Gruber** University of Manitoba, **Ian Whetter** University of Manitoba, **Benjamin Collins** University of Manitoba, **Ming-Ka Chan** University of Manitoba

Background/Purpose: Equity and representation have never been more important. The Black Lives Matter movement and the Truth and Reconciliation Commission highlight the importance of diversity and inclusion work in healthcare and medical education. This Diversity in Medical Education (DiME) project evaluated racial diversity within the undergraduate medical education (UGME) curriculum and gathered students' perspectives on representation to better understand their priorities and ideas to enhance care of structurally disadvantaged groups.

Methods: This student-led project involved collaboration with course directors to adapt content to enhance racial diversity in the Infectious Diseases and Dermatology courses. First and second year medical students at the University of Manitoba were surveyed about perspectives surrounding diversity within these courses and curriculum overall. The number of non-White images within lectures in the two courses were also compared. Results from the pre-survey were compared to post-survey

responses to assess changes in attitudes. A thematic analysis of open-ended responses was conducted.

Results: Students felt there was insufficient representation of patients who identify as Black, Indigenous, or People of Colour (BIPOC). While adapted courses showed a small increase in number of non-White images, it was not reflective of Manitoba's population. Students also identified other areas requiring enhanced representation, as well as recommending a focus on clinical skills and patient descriptors.

Conclusion: Increased representation of skin tones and other intersectionality is essential across the UGME curriculum for transforming the structural inequities inherent within medical education and healthcare. Our study demonstrates the importance of changes in the pre-clerkship curriculum that contribute to this goal.

OA 3-5

69448

Improving Fairness and Equity in a Situational Judgement Test: An Alternate Response Format

Colleen Robb Altus Assessments, **Gill Sitarenios** Altus Assessments, **Kelly Dore** Altus Assessments and McMaster University, **Cynthia Au Yong** Altus Assessments, **Jill Derby** Altus Assessments, **Heather Davidson** Altus Assessments, **Harold Reiter** Altus Assessments and McMaster University

Background/Purpose: Gaining admission into medical school is a difficult task, particularly for minority applicants who face additional barriers with admissions assessments that often favour majority groups. While situational judgement tests (SJTs) commonly exhibit smaller demographic differences in test performance relative to other admissions assessments, evidence suggests that changing from typed response (TR) to audio-visual response (AVR) format may further reduce these differences. Therefore, we aimed to determine whether changing an open-response SJT (Casper) from TR to AVR would reduce demographic differences for a sample of medical school and health science program applicants.

Methods: 1,947 participants completed a twelve-scenario TR Casper test followed by two voluntary AVR scenarios. Mean scores for TR and AVR scenarios were calculated for each demographic group. Group means were compared and effect sizes reported using Cohen's d. Applicant feedback was also collected via surveys and interviews to inform future use of AVR.

Results: When comparing performance of White applicants to Black or African American applicants, AVR produced the lowest group difference of d=0.03. This is compared to the group difference produced by TR (d=0.78). The change to AVR also reduced group differences between native and non-native English speakers (d=0.74 to 0.14), rural and non-rural applicants (d=0.19 to d=0.04), and high- and low-income applicants (d=0.36 to 0.12).

Conclusion: Demographic differences in test performance reduced considerably when response format changed from TR to AVR. These results may help to inform how other assessments can be modified to reduce barriers to medical education. Future research will examine psychometric properties and predictive validity.

OA 3-6

69709

Healthcare Exploration Program: A Medical Innovation Supporting Under-represented Prospective Healthcare Professionals

Veronica Chan University of Ottawa, **Eileen Huang** University of Ottawa, **Farhan Mahmood** University of Ottawa, **Adnan El Adou Mekdachi** University of Ottawa, **Claudine Henoud** University of Ottawa, **Lewis Han** University of Ottawa

Background/Purpose: The positive effect of diversity in healthcare settings has been well described, as patients report better experiences and outcomes. However, there is a lack of minority representation in healthcare. Under-represented students often face socio-economic barriers and lack the necessary support and to pursue healthcare careers. Innovative support programs may be an effective method of increasing the matriculation rates of disenfranchised populations, ultimately improving diversity in the healthcare workforce.

Summary of the Innovation: The Healthcare Exploration Program (HEP) was developed for under-represented prospective healthcare students in 2021. HEP delivers free virtual sessions for 100+ students with exposure to healthcare professions including nursing, pharmacy, medicine, dentistry, and optometry. Session topics include general information about healthcare professions and methods to navigate education and training as a minority member. All speakers are students and healthcare professionals who self-identify as a member of an under-represented group.

Conclusion: Paired anonymous responses from pre- and post-session questionnaires were administered for all three HEP sessions. Questionnaires (n=41) demonstrated that HEP significantly increased the students' a) understanding of different healthcare career options, b) confidence to pursue and prepare for a healthcare profession, and c) awareness of and confidence to find available financial supports. Additionally, significantly more students saw self-representation in healthcare fields after HEP and several students appreciated the personal experiences of under-represented speakers. Mentorship programs can empower under-represented students to overcome barriers to education and build confidence in pursuing healthcare careers.

OA 4 – Virtual Care

Glen 204 – CTCC

OA 4-1

69158

The virtual healthcare hackathon: a cost-efficient way to promote innovation and multi-disciplinary collaboration in medical education

Claire Fine McMaster University, **Neel Sharma** Queen Elizabeth Hospital

Background/Purpose: Despite the rapidly expanding culture of innovation and entrepreneurship in medicine, there are limited educational opportunities for medical trainees to get hands-on experience with healthcare innovation. The opportunities that do exist rarely include collaboration with other disciplines, which is critical to effectively address complex healthcare challenges. The purpose of the healthcare hackathon is to provide medical trainees with exposure to multi-disciplinary teamwork and core concepts of medical innovation.

Summary of the Innovation: The hackathon was a 36-hour invention marathon that brought together interdisciplinary teams of students from all over the world to build prototype solutions to unmet clinical needs. Technical and clinical experts were present to advise teams, and prizes were awarded to top teams. There was a total of 237 participants across 33 countries, with 30 unique disciplines including medicine, computer

science, economics, pharmacy and more. The first-placed team of the hackathon was a group from Waterloo, Canada, who built a machine learning algorithm that improves ICU bed allocation with the aim of reducing surgical shut-downs during COVID-19.

Conclusion: Healthcare hackathons are a relatively simple and resource-saving way to encourage medical trainees to think creatively and embrace innovation. They bring together people from diverse backgrounds and provide a platform for education, collaboration and acceleration of healthcare innovation. They can be adopted by hospitals, departments, medical schools, etc. to create quality ideas and prototype solutions in just a couple of days.

OA 4-2

69162

Good for patients but not learners? An exploration of integrating learners into virtual care

Allison McConnell Western University, **Christopher Watling** Western University, **Lisa Shepherd** Western University

Background/Purpose: The pandemic catapulted virtual care far ahead of its anticipated maturation date, forcing faculty to role model and teach learners with little opportunity to become proficient themselves. With a scant body of pre-pandemic literature now accompanied by a wealth of experience gained under very extraordinary circumstances, it is imperative to describe the faculty implemented frontline strategies and to listen to learners about what's working and what's not. The purpose of this study was to explore the experience of learner integration into virtual care from both the faculty and learner perspectives.

Methods: Using a constructivist grounded theory methodology and sociomateriality as a sensitizing concept, we interviewed 16 faculty and 5 learners from a breadth of specialties, probing their experience of teaching and learning virtual care. Data collection and analysis were conducted iteratively with themes identified through constant comparison.

Results: Participants identified valuable experiences unique to virtual care such as triaging patients who required in-person follow-up; however, both faculty and learners perceived these clinics to offer learning inferior to in-person clinics. A mix of social and material features embedded within virtual clinics upended the routines established at in-person clinics and revealed the value of preparation. All participants expressed desire to keep virtual care a part of their future practice, but most would not include learners.

Conclusion: We found a pandemic paradox: virtual care is valued for patients but not for learners. But if virtual care is here to stay, harnessing its educational potential should be a priority for medical educators.

OA 4-3

69305

"Comfortable with the discomfort": An analysis of the educational experiences of family medicine residents at a virtual COVID-19 clinic

Samantha Inwood Women's College Hospital, **David Rojas** University of Toronto, **Betty Onyura** Unity Health Toronto, **Nicole Woods** The Institute for Education Research (TIER), University Health Network, **Ruth Heisey** Women's College Hospital, **Risa Freeman** University of Toronto

Background/Purpose: Background: Healthcare institutions rapidly pivoted to delivering care virtually due to the unprecedented challenges posed by the COVID 19 pandemic. Although some medical specialties have used a form of virtual care (VC) for decades (e.g., psychiatry) the evidence associated with the skills and competencies required to provide effective

VC, or the educational impact of residents training in VC settings is scarce, particularly in family medicine. Our work focused on understanding the educational affordances associated with a virtual family medicine clinic specializing in COVID patients.

Summary of the Innovation: Innovation: The Family Medicine department at Women's College Hospital in Toronto, Ontario created a completely virtual clinic for managing quarantined COVID patients with mild-to-moderate symptoms. The clinic consisted of family physicians, nurses, and family medicine residents, with access to other allied care professions as needed. Residents were provided with materials to guide patient visits and supported by faculty experienced in providing VC. Daily huddles offered the opportunity to refine processes and practices after its launch.

Conclusion: Conclusions: Interviews (n=12) and exit-surveys (n=5) with family medicine residents at the clinic indicated that this rotation was a positive and productive experience. Through inductive thematic analysis, we identified themes related to the perceived educational value of the clinic, skills and competencies needed to provide high quality VC, and lessons learned for future training. An adaptive expertise framework helped contextualize residents' learning experiences as a substantial portion of skills and competencies needed to deliver VC were translated from in-person practice.

OA 4-4

69332

Creating and Sustaining the Pivot to Virtual Primary Care: Implementation and Evaluation of the Virtual Care Competency Training Roadmap (ViCCTR) in a large postgraduate residency program

Batya Grundland University of Toronto, **Karina Prucnal** University of Toronto, **Nikki Woods** University of Toronto, **Mahan Kulasegaram** University of Toronto, **Maria Mylopoulos** University of Toronto, **Risa Freeman** University of Toronto

Background/Purpose: With the onset of the COVID-19 pandemic and the imperative for physical distancing, family physicians rapidly pivoted to providing virtual care to their patients. However, formal instruction on virtual care was not previously included in many program curricula for family medicine residency training programs. The Virtual Care Competency Training Roadmap (ViCCTR) was designed to address this gap.

Summary of the Innovation: (ViCCTR) is an online education that provides content, resources, and assessment supporting the development of skills necessary to ensure comprehensive virtual care consistent with multiple CanMEDS roles, including Medical Expert, Communicator, Health Advocate and Professional. The ViCCTR modules are grounded in theories from the learning sciences, including adaptive expertise, conceptual coherence and test-enhanced learning. ViCCTR was then distributed to all 360 family medicine residents at the University of Toronto. An iterative cycle of implementation, evaluation and improvement took place where residents who used ViCCTR were invited for interviews to share their experiences, including emergent practices developed in response to their specific clinical contexts. A series of assessments delivered through the modules were used to objectively assess residents' competencies in virtual care.

Conclusion: The ViCCTR modules can support future family physicians to meet the demands of clinical reasoning in a virtual setting on an ongoing basis. These modules can easily be shared with and adapted to multiple different residency programs looking to enhance their trainees' virtual care readiness. In addition, the ViCCTR modules can serve as a model for

the development of future impactful educational interventions for postgraduate learners.

OA 4-5

69086

Teaching virtual health care using a self learning online module

Tania Riendeau Université de Montréal, **Noémi Duguay** Université de Montréal, **Stéphanie Roy** Université de Montréal, **Geneviève Grégoire** Université de Montréal, **Margaret Henri** Université de Montréal, **Véronique Phan** Université de Montréal

Background/Purpose: In the spring of 2020, virtual health care quickly became a clinical reality. Teaching future clerks of Université de Montréal about the best practices of this novel way of practicing medicine was a challenge.

Summary of the Innovation: During the summer of 2021, a literature review was performed on virtual health. The intent was to document the legal implications, promote best practices and identify teaching opportunities. An online asynchronous self-learning module was created since most of the teaching was performed at a distance at that time. The module became an opportunity to gamify and learn through quizzes and associations. Fictional videos were used to show an example of a virtual consultation using the best practice guidelines, while three other videos asked the learners to identify errors made by the fictional clerk. The module also explored the steps in a well-conducted health consultation, legal implications, challenges, advantages, communication and included tools (checklists) which could be used by the teacher to promote best practices.

Conclusion: About three hundred 1st year clerks completed the online training. The overall response was positive. In a survey, 96,7% of students found the teaching method stimulating and found that it facilitated learning. The virtual health self-learning online module proved to be a good educational innovation to prepare clerks for this new reality. The module has since been incorporated in the curriculum and other e-learning modules have been created to prepare students to clerkship.

OA 4-6

69653

The Patient-Centered First Patient Program for First Year Medical Students: Impact of Pandemic Modifications

Brenda Whitney Queen's University, **Andrea Winthrop** Queen's University, **Kathryn Bowes** Queen's University, **Anthony Sanfilippo** Queen's University, **Lindsey Patterson** Queen's University

Background/Purpose: The patient-centered First Patient Program (FPP) pairs first year medical students with patients who have chronic illness. By design, students meet twice with patients in their home, accompany the patient on 3 healthcare visits, and meet twice with the patient's physician. Due to the pandemic, the FPP adapted to a virtual format delivery, while still allowing students to learn the impact of living with a chronic illness.

Summary of the Innovation: Students interacted with patients on Zoom or phone, and participated in healthcare visits (HCV) virtually. A 3rd preceptor meeting was added to focus on discussing the impact the pandemic had on delivery of health care to their patients and on their practice. Students submitted reflective essays on the impact of the pandemic on their patient, preceptor, and healthcare delivery.

Conclusion: Eighty-five percent of students participated in 1-3 virtual HCVs. Those unable to participate in any HCV had additional virtual patient meetings, and completed an alternative reflective assignment. Preceptors reported that students were able to appreciate the challenges of delivering virtual healthcare to complex vulnerable patients. Analysis of student feedback identified that they were able to establish rapport and learn the illness experience through their patient's eyes, despite the inability to meet their patient in person. They learned of struggles that patients experienced seeking healthcare during a pandemic, gained an understanding of patients needing to advocate for themselves, and the impact of a chronic illness. Further, the modifications of the FPP still allowed students to demonstrate empathy, a necessary attribute for future physicians.

OAV 5 Technology & practice

Virtual 1

2022-04-24 10:00 MST

OAV 5-1

69260

Educational effectiveness of social media as a continuing professional development intervention for practicing surgeons: A systematic review.

Rosephine Fernandes Queen's University, **Erin Williams** Queen's University, **Ken Choi** Queen's University, **Boris Zevin** Queen's University, **Laurie Fasola** Queen's University, **Boris Zevin** Queen's University

Background/Purpose: As an educational tool for practicing surgeons, social media has been shown to increase knowledge; however, its impact on higher level continuing professional development (CPD) educational outcomes is unclear. We performed a systematic review to evaluate the educational effectiveness of social media interventions for practicing surgeons and categorized the educational outcomes using Moore's expanded Outcomes Framework for Assessing Learners and Evaluating Instructional Activities.

Methods: We searched electronic databases (Ovid MEDLINE, Ovid MEDLINE Daily and Epub ahead of print) from 1994 to present for articles in English and Spanish. We included studies evaluating the educational effectiveness of social media interventions for practicing surgeons. We excluded studies with surgical trainees, and without evaluation of educational effectiveness. Two independent reviewers assessed the studies for relevance, inclusion, and quality of evidence using CASP tools. Two independent reviewers performed data abstraction and categorized educational outcomes using Moore's framework.

Results: We identified 352 studies with 11 duplicates. We excluded 336 studies after screening, abstracts, titles and full texts. Five studies were selected for inclusion. We rated 3 studies as moderate and 2 studies as strong in study quality. One study demonstrated an improvement in surgeon's knowledge (Moore's Level 3), 2 studies demonstrated improvement in surgeon's skills (Moore's level 4) and 1 study demonstrated a change in surgeon's practice (Moore's level 5).

Conclusion: There is very limited evidence for use of social media to improve surgeon's knowledge, skills and change surgeon's practice; however, it's impact on higher level CPD educational outcomes is unknown.

OAV 5-2

69324

Train them for workflow: Preparing Physicians for the use of Electronic Health Records

Susan Humphrey-Murto University of Ottawa, **Cristian Rangel** University of Ottawa, **Donovan Makus** University of Ottawa, **Sarah Moore** Carleton University, **Karen Watanabe Duffy** University of Ottawa, **Jerry M. Maniate** University of Ottawa, **Melanie Buba** University of Ottawa, **Kate Scowcroft** University of Ottawa

Background/Purpose: Inadequate preparation in terms of educational resources, and training logistics are recognized barriers to meaningful use of Electronic Health Records (EHRs); yet there is very little literature to inform best educational practices. Drawing from the experiences of multiple stakeholders after the implementation of an EHR in two Canadian hospitals, this study identifies real-world factors that may improve the resource allocation for effective EHR training for physicians.

Methods: A qualitative case study was undertaken. Semi-structured interviews were completed (n=44), representing administrative leaders, staff physicians, residents, and EHR trainers. Thematic analysis, informed by sociotechnical theory, was employed for analysis.

Results: Despite undergoing mandatory training, most end-users felt ill-equipped for EHR implementation. They described limited transferability of formal online and classroom training to the workplace. Factors contributing to this included: standardized vendor modules (lacking specificity for the clinical context); variable EHR trainer expertise; limited post-launch training; and insufficient preparation for profound changes to workflow. These impacted almost every aspect of patient care. They described learning while caring for patients and a lack of clinician-centered software necessitating workarounds, which created frustration, anxiety, and fear of harming patients.

Conclusion: Out of the box packages that deliver basic training modules do not appear to meet end-user clinical real-time workflow needs. Training could be improved by providing highly authentic training tailored to each clinical context. It should include all aspects of workflow, from preparation for the clinical encounter, using the EHR during the encounter, and ordering, prescribing, and communicating with the health care team.

OAV 5-3

69408

Training Practicing Physicians in the Use of Electronic Health Records: A Scoping Review

Christopher Tran University of Ottawa, **Cristian Rangel** University of Ottawa, **Brent Wolfrom** Queen's University, **Karine Fournier** University of Ottawa, **Clara Sawires** University of Ottawa, **Susan Humphrey-Murto** University of Ottawa

Background/Purpose: Electronic health records (EHRs) are widespread, yet ineffective EHR training has led to frustration and burnout among practicing physicians. Most studies focus on trainees, offer limited insight on practicing physicians, and are not guided by educational theory. We conducted a scoping review to explore what is known about training practicing physicians in EHR use to inform implementation of future educational interventions.

Methods: Using Arksey & O'Malley's framework, eight databases were searched for articles published between January 2010 and May 2021. We included studies describing interventions for training practicing physicians in EHR use. In varying pair combinations, two authors worked independently to screen articles for inclusion and to review included full-text articles.

Results: Among 8,025 articles, 197 were eligible for full review, and 22 met final inclusion criteria. Twelve studies featured workshops (55%); others included eLearning, lectures, and individualized learning plans. Fourteen studies (64%) noted positive participant satisfaction, eleven studies (50%) assessed knowledge/skills, and fifteen (68%) reported behavioural change. Higher-order outcomes varied considerably from use of specific EHR features to time spent after hours; outcomes were mostly self-reported by participants although some studies also used EHR vendor generated metrics. Only six studies (27%) mentioned learning theory and only nine studies (41%) performed a formal needs assessment.

Conclusion: If the goal is to minimize burnout caused by EHR use, future studies should aim to engage practicing physicians in optimizing their EHR performance. Future educational interventions should focus on improving meaningful outcomes for participants as informed by learning theory and formal needs assessment.

OAV 5-4

69416

Moving Towards Mastery - A Needs Assessment of Online CPD Provision During the Pandemic

Morag Paton University of Toronto, **Heather MacNeill** University of Toronto, **David Wiljer** University of Toronto, **Suzan Schneeweiss** University of Toronto

ackground/Purpose   COVID19 precipitated rapid change to the design and delivery of online Continuing Professional Development (CPD). Providers needed to quickly develop new technological skills and competencies. This study aims to describe CPD providers' comfort, resources, perceived advantages/disadvantages, and consensus on issues around privacy and copyright, in technology-enhanced CPD.

Methods: A survey tool was developed and piloted during the pandemic. A final 26-item online survey was deployed in 2021 through Qualtrics using purposive and convenience sampling. The survey gathered information from local and international CPD providers about perceptions and needs for moving from a largely face-to-face medium of CPD delivery to a virtual one. Descriptive statistics were produced using SPSS.

Results: The survey had a 15.5% response rate (n=111). 81% felt confident to provide online CPD, but less than half reported access to IT, financial, or faculty development supports to do so. Reaching a new demographic was the highest reported advantage to online CPD delivery with zoom fatigue reported as the highest disadvantage. There was interest in using collaboration tools, virtual patients, and augmented/virtual reality in future online CPD delivery. Consensus on privacy and copyright issues in the online environment was not consistent amongst CPD providers.

Conclusion: Effective multicomponent, multimedia, longitudinal, and interactive CPD can be enhanced by technology but while the pandemic has enabled CPD providers to develop comfort using these tools, they need to be further supported in their efforts to move towards mastery and best practices.

OAV 5-5

69468

Are We Preparing Health Care Professionals to Use, Interpret and Explain Results from Artificial Intelligence? A Scoping Review and Comparison of Program Curricula and Recommended Content

Rebecca Charow Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Tharshini Jeyakumar** University Health Network, **Sarah Younus** University Health Network, **Elham Dolatabadi** Vector Institute; University of Toronto, **Mohammad Salhia** Michener Institute, University Health Network; Ontario Institute for Studies in Education, University of Toronto, **Dalia Al-Mouaswas** Michener Institute, University Health Network; Ontario Institute for Studies in Education, University of Toronto, **Melanie Anderson** University Health Network, **Sarmini Balakumar** Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Megan Clare** Michener Institute, University Health Network, **Azra Dhalla** Vector Institute, **Caitlin Gillan** University Health Network; Department of Radiation Oncology & Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, **Shabnam Haghzare** Vector Institute; University of Toronto, **Ethan Jackson** Vector Institute, **Nadim Lalani** Vector Institute, **Jane Mattson** Michener Institute, University Health Network, **Wanda Peteanu** , **Tim Tripp** University Health Network, **Jacqueline Waldorf** Michener Institute, University Health Network, **Spencer Williams**, **Walter Tavares** Wilson Centre, University Health Network; University of Toronto, **David Wiljer** University Health Network; Department of Psychiatry & Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto

Background/Purpose: Artificial intelligence (AI) will continue to be increasingly adopted in healthcare settings. Healthcare professionals (HCPs) and trainees are not prepared for AI implementation. Curricula including fundamentals of AI are emerging in all levels of medical education. The purpose of this scoping review is to determine: (1) what programs exist, (2) what curricular content was delivered (3) how programs were delivered, (4) how existing curricula compared to AI education program recommendations, (5) enablers and barriers to program implementation, and (6) program evaluation outcomes.

Methods: This scoping review followed Arksey and O'Malley's methodology to synthesize the extant literature on AI training within medical education. Articles were identified through 8 databases and undergone a two-stage screening process by two independent reviewers: 1) title/abstract scan; and 2) full-text review. Analysis consisted of a numeric summary and thematic analysis of curricular topics and implementation factors.

Results: Forty-one articles were identified, of which 10 articles detailed 11 unique programs and the remaining 31 articles detailed recommended curricular content. Curricular topics were deductively grouped Bloom's taxonomy of learning domains (cognitive, psychomotor, and affective). Factors contributing to the success of AI programs include interfaculty collaboration and working within existing regulatory structures. Two major barriers identified were varying levels of AI literacy amongst curriculum developers and lack of infrastructure to integrate AI content within existing programming.

Conclusion: Guiding principles for future AI education development include: 1) new regulatory strategies to prioritize developing an AI literate workforce; 2) a multidisciplinary approach to curriculum redesign and program delivery; and 3) competency-based curriculum design.

OAV 5-6

69535

Using Holo Lens Technology for Clinical Learning in an Ears, Nose and Throat Outpatients; A 'Proof of Concept' Study

Hisham Khalil Peninsula Medical School, University of Plymouth, **Robert Hart** Peninsula Medical School, University of Plymouth, **Jamie Carmichael** Peninsula Medical School, University. of Plymouth, **Arunangsu Chatterjee** Peninsula Medical School, University of Plymouth

Background/Purpose: The COVID-19 pandemic has had a significant negative impact on clinical learning opportunities for medical students. This is for a variety of reasons including infection control, minimising risks to patients, students and staff. Most NHS hospitals in the UK stratified clinical areas into Red, Amber and Green in relation to the risk of COVID-19 infection. Ears, Nose and Throat (ENT) surgery is a speciality that has had most of its clinical areas designated as Red due to the presence of Aerosol-Generating Procedures (AGP) including endoscopy in an outpatient setting. The above limitations have curtailed the clinical learning of medical students with the need to adopt strategies and new technologies to mitigate for the restriction of patient contact.

Summary of the Innovation: A 'Proof of Concept' study was carried out to test the feasibility of delivering clinical learning in an ENT Outpatient setting. This involvedhistory taking, examination (including nasal endoscopy) and discussion of management plans with patients. A Microsoft HoloLens 2 device was used by the Consultant ENT Surgeon in the ENT Outpatients and the clinical environment relayed to year 3 and 5 medical students in a secure digitally-enabled learning environment. Six years 3 and 5 medical students attended the consultation remotely and completed a written Likert scale questionnaire with Likert with a a free text . Students' responses were overall in strong agreement or agreement with the statements suggesting a positive learning experience.

Conclusion: The Microsoft HoloLens can provide effective learning for medical students with appropriate governance procedures in place.

OAV 6 Assessment

OAV 6-1

69069

Does Allowing Access to Electronic Differential Diagnosis Support Threaten the Validity of a Licensing Exam?

Matthew Sibbald McMaster University, **Debra Pugh** Medical Council of Canada, **Jonathan Sherbino** McMaster University, **Maxim Morin** Medical Council of Canada, **Geoffrey Norman** McMaster University, **Sandra Monteiro** McMaster University

Background/Purpose: Medical licensing exams frequently test examinees' diagnostic ability. However, diagnostic skills can be improved with electronic differential diagnosis support (EDS). The purpose of this study is to determine how using an electronic differential diagnosis support (EDS) impacts examinees' results when answering clinical diagnosis questions.

Methods: The authors recruited 100 medical students from McMaster University (Hamilton, Ontario) to answer 40 clinical diagnosis questions in a simulated examination in 2021. Of these, 50 were first year students and 50 were final year students. During the survey, half of the students had access to Isabel (an EDS) and half did not. We explored the effect of EDS on test scores and reliability.

Results: Test scores were higher for final year versus first year students ($53\pm 13\%$ versus 29 ± 10, F=124.9 p<0.001) and higher with the use of EDS ($44 \pm 28\%$ versus $36 \pm 26\%$, F=11.6 p<0.001). Item discrimination was not impacted by EDS use. However, a significant interaction existed,

such that item discrimination and test time both increased with EDS use among final year students, but not among first year students.

Conclusion: EDS use during diagnostic licensing style questions was associated with modest improvements in performance, maintained item discrimination and test reliability. Given that clinicians have access to EDS in routine clinical practice, allowing EDS use for diagnostic questions would maintain ecologic validity of testing while preserving important psychometric test characteristics.

OAV 6-2

69085

A Mixed-Methods, Validity Informed, Program Evaluation of a Virtual OSCE for Undergraduate Medicine Clerkship

Jenny Cho University of Toronto, **Giovanna Sirianni** University of Toronto, **David Rojas** University of Toronto, **Jana Lazor** University of Toronto, **Glendon Tait** University of Toronto, **Yuxin Tu** University of Toronto, **Joyce Nyhof-Young** University of Toronto, **Kulamakan Kulasegaram** University of Toronto

Background/Purpose: A review of the literature on virtual Objective Structured Clinic Examinations (vOSCE) has revealed a focus on capturing stakeholder perceptions of acceptability. This study explores a more in-depth understanding of the benefits/limitations from the perspective of key stakeholders and recommendations for improving vOSCEs in future through a mixed-methods approach.

Methods: The authors use Messick's validity framework to report evidence related to content, response process and consequential validity. Data gathered includes an online survey post vOSCE followed by focus group recruitment of students and assessors. Descriptive statistics were collected and de-identified transcripts were reviewed independently and analyzed via constant, comparative, descriptive thematic analysis.

Results: Validity considerations are elaborated on in the context of the vOSCE. Survey results showed the vOSCE was a feasible option for assessing history taking, clinical reasoning and counselling skills. Limitations related to assessing subtle aspects of communications skills, physical exam competencies and technical disruptions. Beyond benefits and drawbacks, the major qualitative themes included recommendations for faculty development, technology limitation, professionalism and equity in the virtual environment. Reliability of the 6 stations on each day reached satisfactory level with a G-coefficient of 0.51/0.53.

Conclusion: This implementation of a virtual, summative clerkship OSCE demonstrated adequate validity evidence and feasibility. Key lessons learned relate to faculty development content, ensuring equity and considerations for academic integrity. Future directions of study include the role of vOSCEs in the assessment of virtual care competencies and the larger role of OSCEs in the context of workplace based assessment and competency based medical education.

OAV 6-3

69513

The CBME Disillusion in Critical Care Medicine: How well intended changes led to pervasive, detrimental assessment perceptions and behaviors.

Dominique Piquette University of Toronto, **Briseida Mema** University of Toronto, **Christie Lee** University of Toronto, **Walter Tavares** University of Toronto, **Ryan Brydges** University of Toronto, **Stella Ng** University of Toronto

Background/Purpose: Major challenges complicate the implementation of programmatic assessment, including limited engagement of trainees/faculty, and persistent lack of high-quality feedback. We aimed to explore how a program of low-stakes workplace-based assessments (WBA) was designed, implemented, and modified in two Canadian critical care postgraduate training programs to support learning and assess competence.

Methods: We conducted a pragmatic, longitudinal, multiple case study of the implementation of a new WBA program in two postgraduate critical care training programs. We used purposive sampling to select hospital sites, faculty, and trainees within each program, and iteratively conducted two phases of semi-structured interviews and direct observations. We structured the dataset and analyses according to pre-specified theoretical assumptions that focused on engagement and feedback. Co-investigators regularly reviewed thematic summaries to discuss relationships between themes and the final analytical framework.

Results: Between 2016 and 2021, we conducted 27 interviews and 6 observations. Initial interviews revealed that CBME brought hope for more meaningful, comprehensive, and fair assessments in critical care. Well-intended, key implementation programs' decisions included: assessing all relevant clinical activities, resident-led assessments, and using WBA forms to document feedback. These choices, together with contextual challenges, led to the unintended, pervasive adoption of detrimental assessment habits. Faculty admitted providing dishonest feedback, lacking initiative, and struggling with 'soft' skills assessment. Residents recognized asking for assessments retrospectively, to 'kinder' faculty, and for activities they self-assessed as performing well. Participants perceived WBA forms as a burden that instilled fear of negative consequences.

OAV 6-4

69638

Using learning analytics to examine predictors of documented feedback quality in low-stakes workplace-based assessments

Jonathon Lee University of Alberta, **Shelley Ross** University of Alberta

Background/Purpose: Effective (i.e., high-quality) formative feedback promotes guided self-assessment for learners in competency-based medical education (CBME). Although our understanding of verbal feedback/feedback conversations that occur between teachers and learners has grown, the factors that influence the quality of narrative feedback (e.g., comments or feedback on workplace-based assessment forms) remain poorly understood. These narratives serve as memory prompts and are crucial to learner reflection and self-assessment. Thus, it is essential to develop an understanding of factors that predict quality of documented feedback.

Methods: We used a learning analytics approach to examine archived assessment data in a family medicine residency program. We extracted 5634 low-stakes workplace-based assessments (fieldnotes) that contained narrative feedback, judgement of competence, competency observed, and clinical population from three teaching sites over three academic years (2015-2018). We performed multinomial logistic regression (MLR) to uncover predictors of feedback quality.

Results: Analysis revealed that 58% of fieldnotes contained high-quality feedback, 24% poor-quality, and 18% contained no feedback. MLR identified multiple factors that predicted high-quality feedback: two competencies (communication, teaching); four clinical domains (physician-patient relationship, palliative care, care of adults, care of the vulnerable), and judgements of resident competence that were on the lower end of the scale.

Conclusion: The quality of feedback in fieldnotes was influenced by the competency observed, the associated clinical population, and the perceived level of competence of the learner being observed. This

exploratory study sheds new light on the factors that predict the quality of the feedback that preceptors record on low-stakes assessment forms.

OAV 6-5

69665

Learner Handover: What Do The Learners Think?

Tammy Shaw University of Ottawa, **Susan Humphrey-Murto** University of Ottawa, **Kori LaDonna** University of Ottawa, **Karen E. Hauer** University of California, San Francisco, **Roy Khalife** University of Ottawa, **Leslie Chung-Lei Sheu** University of California, San Francisco, **Timothy J. Wood** University of Ottawa, **Anne Montgomery** University of California, San Francisco, **Scott Rauscher** University of Ottawa, **Simran Aggarwal** University of Ottawa

Background/Purpose: Learner handover (LH) is the sharing of information about trainees between supervisors to build upon previous assessments, fitting well within the growth-oriented competency-based medical education movement. However, the potential to bias future assessments and risk of breaching confidentiality are concerns. Moreover, little is known about LH's educational impact, and what is known is largely informed by faculty and institutional perspectives. The purpose of this study was to understand LH from the learner's perspective.

Methods: We used constructivist grounded theory to explore learners' perspectives and beliefs around LH. We conducted 31 semi-structured interviews with medical students and residents from the University of Ottawa and University of California, San Francisco. Themes were identified using a constant comparative analysis.

Results: Learners are generally unaware about current LH practices, although most recognize it occurs in some fashion formally and informally. Its use to tailor education, guide entrustment, and ensure patient safety were appreciated. However, concerns about bias, confidentiality, and perceived gossip were notable. Specifically, learners feared unfair scrutiny, loss of the "clean slate," and irreversible long-term career consequences from one shared mediocre performance, leading to overwhelming pressure to perform, exhaustion, and uncertainty whether LH would truly be beneficial.

Conclusion: While learners recognize the theoretical reasons for LH, they voiced reservations about its use. LH implementation needs to consider these perspectives to ensure it benefits the learner as intended. Ensuring transparency, learner-driven goals, and standardized processes are some strategies that may ease learner anxiety about its impending use in medical education.

OAV 6-6

68527

Using Electronic Health Record Data to Facilitate Feedback Discussions and Foster Coaching Relationships

Stefanie Sebok-Syer Stanford University, **Robert Sedran** Western University, **Allison McConnell** Western University, **Lisa Shepherd** Western University, **Jennifer Shaw** Western University, **Adam Dukelow** Western University, **Mark Syer** Queen's University, **Lorelei Lingard** Western University

Background/Purpose: The availability and access of electronic health record data (EHR) is a game changer for medical education, but little is known about their utility for educational aspects such as teaching, assessment, and feedback. The purpose of this study was to pilot a process for using resident report cards based solely on EHR data, which captures both independent and interdependent clinical performance, to support feedback discussions and coaching between Emergency Medicine (EM) faculty and residents.

Methods: Using Action Research methodology, 8 EM residents were presented with individualized report cards containing EHR data metrics from 2017-2020; the exact number of report cards for each resident varied depending upon their year-in-training and availability of data. Then, each resident self-selected one of three EM faculty to engage in feedback discussions and coaching. Dyadic feedback sessions followed the R2C2 framework, were audio-recorded, and transcribed prior to analysis.

Results: While some participants expressed concerns about data representation and subsequent interpretation, every resident expressed that having a personalized report card was valuable for learning. Moreover, opportunities for in-depth conversations with faculty allowed residents to explore report card content, identify areas for improvement, and receive detailed, personalized feedback and tailored coaching regarding their clinical performance.

Conclusion: Our findings revealed that participants were keen on having access to EHR data metrics that reflect resident clinical performance and eager to build coaching relationships to support interpreting such data. This work gleaned important insights about EHR data and has implications for how EHR data are used in competency-based medical education moving forward.

OAV 7: Black health & wellness / clerkship

Virtual 3

OAV 7-1

69699

An Anti-Racism Advocacy Workshop for Medical Learners Transitioning into Clerkship

Adesewa Adeleye University of Alberta, **Anulika Nwakaeze** University of Alberta, **Melanie Lewis** University of Alberta

Background/Purpose: In the spring of 2020, Black medical students across Canada gathered for an inaugural general meeting, featuring over 60 students. This marked the beginning of widespread calls for change in Canadian medical schools, led by Black medical students and allies. A Calls to Action was developed by the Black Medical Students Association (BMSA) at the University of Alberta. This included curriculum reform targeting critical race theory, systemic bias in clinical medicine, and content to increase structural competency of learners entering clerkship. In response to the Calls to Action, the BMSA collaborated with administrative leadership to pilot an interactive workshop for learners transitioning into clerkship.

Summary of the Innovation: The goal of the workshop was to provide authentic simulated clinical experiences on systemic racism in medicine to empower learners to be able to recognize, respond, and support others facing racism. The simulated experiences addressed three levels of interaction: peer to peer, peer to preceptor, and preceptor to patient, which were explored in small group settings. Three communication tools were used to illustrate approaches to responding directly to racism, supporting a person experiencing racism, and debriefing such experiences with a third party, respectively. A novel tool, coined "The Curiosity Tactic", was utilized to break down assumptions driving racist behaviour. Pre and post-workshop surveys addressed whether workshop objectives were achieved.

Conclusion: The anti-racism advocacy workshop was an innovative approach to address a curriculum deficit. Full analysis of the learner surveys are in progress. The workshop is in the process of being adapted for other healthcare programs.

OAV 7-2

68738

How can we teach clerkship medical students the multidisciplinary aspects of dermatology? A medical education initiative

Megan Chan University of British Columbia, **Chaocheng Liu** University of British Columbia, **Vivienne Beard** University of British Columbia, **Pamela Mathura** University of Alberta, **Marlene Dytoc** University of Alberta

Background/Purpose: Canadian medical schools offer minimal clinical dermatology training for clerkship students. The limited available educational resources for them usually focus on primary skin conditions, therefore it is challenging for students to understand the multidisciplinary nature of dermatology in a clinical setting. The study objective was to develop case-based educational resources to help bridge this gap and assess their effectiveness.

Methods: Ten online interactive dermatology case-based modules involving 15 different disciplines were created. Medical students from two schools were surveyed regarding perceptions of their dermatology curriculum. After the modules, they completed five-point Likert scale ratings on improvement of dermatology knowledge, understanding of multidisciplinary care, and narrative feedback.

Results: Among 77 surveyed students, only 15.2% agreed their pre-clerkship dermatology education was sufficient and 7.6% felt comfortable seeing patients with skin conditions in a clinical setting. Among 43 students who completed the modules, 95.3% of students agreed the modules fit their learning style (4.16±0.75 on Likert scale) with positive narrative feedback. 90.7% agreed or strongly agreed the modules enhanced their dermatology knowledge (4.26±0.62). 79.1% of students agreed the modules helped with understanding the multidisciplinary nature of the cases (3.98±0.83). Student responses agreeing that dermatology involves multidisciplinary care increased 7-fold from 10.1% to 76.7% post-module.

Conclusion: There is a strong need for dermatology educational resources specifically for clerkship students. Case-based modules can be an accessible tool to enhance dermatology knowledge and understanding of multidisciplinary dermatology. The study provided insight into ways dermatology education can be provided for clerks when clinical resources are limited.

OAV 7-3

69143

Enhancing Readiness for Clerkship - A Transition to Clerkship Curriculum

Alice Tsui Western University, **Murad Husein** Western University

Background/Purpose: The transition from classroom-based learning to workplace learning of clerkship is a time of stress and uncertainty for medical students. Practical knowledge of how to perform daily tasks (e.g. note and order writing, dictations, handover), the relationships and roles of health care team members, and workplace culture and self-care would help prepare students to enter the clinical learning environment. A previous orientation to clerkship curriculum was 1-2 weeks in length and did not address these issues adequately. A new 16-week Transition to Clerkship Curriculum was designed and implemented for 2021.

Summary of the Innovation: For each of the clerkship rotations of Medicine, Surgery, Family Medicine, Obstetrics and Gynecology, Pediatrics and Psychiatry, cased-based curriculum was developed around the course framework to address (1) Tasks of a physician, (2) Workplace Relationships and Roles, (3) Workplace culture and routines. Assignments were designed for students to have deliberate practice for tasks. Multidisciplinary panel discussions introduced health care team members and their roles. Near-peer sessions were designed and led by upper year

medical students and/or residents with focus on the student role and self-care, as well as to answer questions in a psychologically safe environment.

Conclusion: Program evaluation showed students found it valuable to perform clerkship tasks and receive feedback prior to entering clerkship. Near-Peer sessions decreased anxiety for students. Students felt the course was essential for clerkship success. Follow up on this cohort of students currently in clerkship will continue to assist in course improvement.

OAV 7-4

69192

Going beyond the preclinical program: Exploration of the use of Self-explanation and Structured reflection learning strategies by clerkship students

Martine Chamberland Université de Sherbrooke, **Vanessa Beaudoin** Université de Sherbrooke, **Isabelle Boulais** Université de Sherbrooke, **Linda Bergeron** Université de Sherbrooke, **Timothy Dubé** Université de Sherbrooke, **Christina St-Onge** Université de Sherbrooke

Background/Purpose: While educators observe gaps in clerkship students' clinical reasoning (CR) skills, clerkship students state having few opportunities to develop these skills. The purpose of this study was to explore how clerkship students who used self-explanation (SE) and structured reflection (SR) for CR learning at the preclinical level, spontaneously applied these learning strategies during clerkship.

Methods: We conducted a sequential mixed-method study. Starting with a survey, we asked students how frequently they adopt behaviours related to SE and SR during clerkship and what were the barriers and facilitators to the adoption of the behaviours. Next, we conducted a focus group with students to further explore why they engaged with these behaviours.

Results: Fifty-two of 198 students answered the survey and five students participated in a focus group. Specific behaviour adoption varied from 49% to 98%. Limited time was perceived as an important barrier while positive learning environment was seen as a facilitator to adopt these behaviours. Students adopted the behaviours to help them 1- become responsible and autonomous in their learning (SE, SR), 2- deepen their understanding and identify gaps in their knowledge (SE), and 3- develop a practical approach to diagnosis in clinical context (SR).

Conclusion: Students seemed to have adopted SE-SR strategies and applied them during their clerkship. The adoption of behaviours related to SE and SR by students could be reinforced by providing more explicit guidance about possible uses of these strategies during clerkship and by promoting among clinical supervisors the importance of fostering a positive learning environment.

OAV 7-5

69436

Medical Students' Perceived Readiness for Clerkship - 8 Years of Survey Data

Darrell Kyte Dalhousie University, **Dr. Simon Field** Dalhousie University

Background/Purpose: For the past 8 years Dalhousie University has conducted an annual survey of medical students to evaluate their perceived readiness to begin clerkship. The survey asks students to assess their ability to perform key physician tasks, with or without guidance or assistance, to better understand the function of our undergraduate medical education in preparing students for clerkship training. The information provided is invaluable and was used to improve the

effectiveness of the first two years of our Dalhousie University MD program and to guide curriculum renewal.

Methods: The Clerkship Readiness Survey has been administered annually for the past 8 years to clerks shortly after commencement of clerkship and allowed students to self-evaluate their comfort in dealing with various aspects of clinical practice. It was sent to students via ONE45 and consisted of both Likert scale questions and open-ended feedback.

Results: Survey results show consistency in the skills with which students are most and least comfortable. For example, students consistently report more comfort with communication skills and less comfort with developing management plans for their patient's problems. Results are also consistent across Dalhousie's two campuses; however, differences were evident between male and female students with respect to a number of skills. Open-ended feedback showed students felt well-prepared in communication skills but additional emphasis was needed in pharmacology, particularly prescribing.

Conclusion: Clerkship Readiness survey data been used in renewing curriculum to improve the effectiveness of the first two years of Dalhousie's MD program in preparing students for clerkship.

OAV 7-6

69520

How much is enough? Setting achievement thresholds for core EPAs of graduating medical students in Canada

Adrian Harvey University of Calgary, **Kevin McLaughlin** University of Calgary, **Mike Paget** University of Calgary, **Janeve Desy** University of Calgary

Background/Purpose: Application of competency-based assessment systems within undergraduate medical education is crucial towards establishing consistency with the post-graduate model and ensuring a smooth transition between stages of training. The AFMC has proposed 12 EPAs for Canadian graduating medical students. The purpose of this study was: 1) to apply an established process to set thresholds for achievement in each of the AFMC EPAs; and 2) to assess the feasibility & consequences of applying these thresholds to our existing clerkship structure.

Methods: Three consecutive groups of individuals with relevant expertise were selected to participate in structured communication using a modified Delphi technique. Answers were provided anonymously and collated for feedback by the facilitator. Consecutive rounds of communication continued until consensus was achieved. The EPA assessments were then applied to the graduating clerkship class to assess feasibility and consequences.

Results: The overall completion rate of EPAs was 96.27%. 67.5% were completed within clinical encounters and 32.5% within the summative clerkship OSCE. The rate of EPA accumulation slowed as the clerkship progressed.

Conclusion: A modified Delphi technique led to the achievement of consensus thresholds for each of the AFMC EPAs for graduating medical students. The application of these assessments within a pandemic truncated clerkship year demonstrated the feasibility of this assessment system within the existing clerkship structure. The slowing rate of accumulation throughout the year suggests that students felt the thresholds were attainable.

OAV 8: UGME

Virtual 4

OAV 8-1

69303

Interprofessional Education on Healthcare Barriers Faced by Asylum Seekers and Refugees to Foster Inclusive Medical Practice and Patient Advocacy

Soukaina Hguig McGill, **Lyna Siafa** McGill, **Jobanpreet Dhillon** McGill, **Asmaa Housni** McGill, **Juan Carlos Chirgwin** McGill, **Amina Ferroum** McGill, **Lydia Bourdache** McGill

Background/Purpose: Medical students are expected to foster health advocacy skills during medical training by learning to become socially accountable and contributing towards efforts that improve population health in the local community. However, limited effort has been made at McGill University to educate medical students on the healthcare needs and available services for the highly prevalent asylum seeker/refugee population in Montreal. This perpetuates a lack of support and discrimination towards this vulnerable migrant population, subsequently leading to inequitable health outcomes.

Summary of the Innovation: An interprofessional healthcare symposium was organized by McGill students to highlight challenges faced by the local asylum seeker/refugee population and to provide students in healthcare-affiliated programs with practical tools to address these barriers. The symposium consisted of five days of seminars delivered by healthcare professionals on topics including nutrition and language barriers, maternal and child health, LGBTQ+ health, racism, mental health, and community resources. Post-seminar clinical vignettes and skill-based workshops facilitated consolidation of seminar themes. A total of 240 students attended the symposium from programs including medicine (65.4%), social services (16.4%), nursing (5.0%) and dietetics (1.2%). Among the students who attended three-or-more seminars and were eligible for 'Migrant Health' certification (n=36), 92% felt more confident in working with the asylum seeker/refugee population.

Conclusion: The interprofessional healthcare symposium aimed to address the current lack of education in migrant health in McGill's medical curriculum. Future work will focus on integrating the 'high-value' seminars into medical education to teach future physicians inclusive medical practice and diminish barriers for vulnerable populations.

OAV 8-2

69105

Investing in Canadian medical trainees using the Medical Mini-MBA, a financial education intervention, to improve financial literacy

Eric Poon Dalhousie University, **Paul Bissonnette** Dalhousie University, **Sina Sedighi** Dalhousie University, **Wyatt MacNevin** Dalhousie University, **Ketan Kulkarni** Dalhousie University

Background/Purpose: Financial literacy correlates with less debt and better retirement planning, leading to an improvement in financial wellness. Medical students and residents often have poor financial literacy and excessive post-graduate debt. Through creating and implementing a financial literacy course, we measured the baseline financial literacy of medical students and residents and whether it changed upon course completion.

Summary of the Innovation: We created the Medical Mini-MBA, a six-week course to target common gaps in financial literacy among medical students and residents. The course delivered weekly topics on: personal finance, investing, real estate & mortgage, physician billing & payment models, income & taxation, and medical specialty selection. Experts

taught content and provided examination questions to create a 46-question financial literacy assessment. The exam was delivered to participants before and after the course. 179/276 course participants also enrolled in our study.

Conclusion: The financial literacy course improved examination scores by 22% (p<0.01). Self-perception of financial literacy was positively correlated with financial literacy scores (r=0.366, p<0.01). Participants who self-reported low levels of financial stress scored highest on the financial literacy exam (p<0.05). Demographic factors had little to no effect on financial literacy scores. The lack of financial education during medical training must be addressed to improve financial wellbeing of physicians. The Medical Mini-MBA improved financial literacy in medical students and residents. Participant feedback strongly suggests that a financial education intervention would be a valuable addition to the medical curriculum. Future investigations will explore financial knowledge retention and behavioural change pertaining to financial decision-making upon course completion.

OAV 8-3

69200

Piloting a National Pain Management and Substance Use Curriculum for Undergraduate Medical Education

Lisa Graves Western Michigan University Homer Stryker M.D. School of Medicine, **Jennifer Turnnidge** Queen's University, **Amber Hastings-Truelove** Queen's University, **Nancy Dalgarno** Queen's University, **Fran Kirby** The Association of Faculties of Medicine of Canada, **Richard van Wylick** Queen's University

Background/Purpose: In 2018, the Association of Faculties of Medicine of Canada (AFMC) piloted an online national, comprehensive, competency-based curriculum for undergraduate medical students in pain management and opioid use disorder. These online modules are easily accessed and can be integrated into existing undergraduate medical education. This initiative closes educational gaps and empowers the next generation of physicians with the knowledge, skills, and resources needed to diagnose, treat, and manage pain and substance use.

Methods: Medical students (n=187) from across Canada participated in the pilot program for this curriculum in either French or English. The pilot ran from September to November 2020. Participants completed online pre- and post-program surveys, and 10 post-module surveys to assess the value, usability, and feasibility of the six topics covered in this curriculum.

Results: Participants statistically gained new knowledge and skills relevant to each topic including advocacy, non-pharmacological options for pain management, prescribing best-practices for opioids, motivational interviewing, pathophysiology pathways of pain, recognizing the secondary effects of opioids, and prescribing for unique populations. The qualitative analysis revealed that the module strengths included that material was relevant and useful for future clinical practice. Module weaknesses included module length and technological issues.

Conclusion: The curriculum addresses teaching and learning gaps in undergraduate medical education. Feedback from the pilot was used to further adapt the program to meet the needs of medical students. A curriculum is presently being developed for postgraduate medical education and continuing professional development that scaffolds this work.

OAV 8-4

69479

Addressing the taboo of money in medicine: Why implementing a more rigorous financial education curriculum in Canadian medical schools is necessary

Parsa Tahvildar McMaster University, **Ejaz Causer** McMaster University, **Myles Ashall** McMaster University, **Jason Profetto** McMaster University

Background/Purpose: Within the Canadian medical field, the topic of finance is often considered taboo. Concepts relating to debt management, financial security, retirement planning, investing, and practice management are taught infrequently which produces a class of future physicians that are not well equipped to manage the financial aspect of medicine. We believe that a more robust financial literacy curriculum should be provided to medical students to facilitate financial independence and improve stress associated with debt management. This has proven to improve the quality of care that physicians are able to provide.

Summary of the Innovation: Based on the literature review, class survey, and case reports on American medical programs, we propose a medical undergraduate financial literacy curriculum consisting of five 60-minute sessions during pre-clerkship with an accompanying "financial literacy" manual. The focus of these sessions will be debt management, physician remuneration, entrepreneurship in medicine, investment planning, and insurance. Utilizing the "spiral learning theory", these topics will be re-visited throughout clerkship with an additional three sessions.

Conclusion: While this curriculum is still in the developmental stages, other North American schools have found positive results following the implementation of similar curricula. One study demonstrated that close to 85% of students felt they benefited from a financial literacy curriculum with self-assessed knowledge regarding finance and business nearly doubling. We anticipate that the proposed curriculum will follow this trend yielding positive feedback and equipping students with practical skills that they would have otherwise lacked.

OAV 8-5

69387

Promoting Research Among Canadian Medical Students: An Online Webinar

Justin-Pierre Lorange McGill, **Jobanpreet Dhillon** McGill, **Anne Xuan-Lan Nguyen** McGill, **Caroline Najjar** McGill

Background/Purpose: Research engagement during medical training is becoming increasingly important for students. Medical institutions are incorporating journal clubs, research-focused lectures, and local conferences in their curriculum to teach students the value of evidence-based medicine. However, medical students continue to have difficulty finding clinical research opportunities. The current work aims to implement a webinar series focused on informing medical students about strategies for securing rewarding research positions and the importance of research productivity for residency programs.

Summary of the Innovation: McGill medical students hosted an online webinar during which successfully matched senior medical students from 12 different specialties gave a 5-minute presentation on their research motivation, experience, and productivity during medical school. Speakers also discussed the impact of their research experience on the residency matching process for their respective programs, followed by a 3-minute question-and-answer period. A total of 170 students from 8 Canadian medical institutions attended the webinar for a mean (± standard deviation) duration of 80.7±40.5 minutes. Most attendees were junior medical students: pre-med (23%), med-1 (32%), med-2 (36%), med-3 (5%)

and med-4 (4%). Post-webinar questionnaire responses (n=78) revealed that students found the talk to be highly relevant (4.5±0.62; 0-5 Likert scale) for research planning in medical school.

Conclusion: Our online innovative research webinar provided undergraduate medical students with the opportunity to network and understand the research background of recent graduates matched to a variety of specialties. Future direction includes hosting bi-annual webinars and inviting program directors to highlight the impact of scholarly research work for their respective residency program.

OAV 8-6

69507

Examining students' perception of rural practice following an educational strategy aimed at preparing post-secondary students for rural careers: A review of the qualitative literature and synthesis

Brenton Button University of Winnipeg, **Erin Cameron** Northern Ontario School of Medicine, **Kirstie Taylor** Northern Ontario School of Medicine, **Sophie Regalado** Northern Ontario School of Medicine

Background/Purpose: Rural communities have unique healthcare workforce challenges that have manifested in worse health outcomes. As a result, some universities have adopted educational strategies to prepare students for careers in rural communities to increase the number of healthcare professionals practicing in rural spaces. The purpose of this literature review and synthesis was to understand the current research body and synthesize students' perceptions of rural practice following an educational strategy aimed at preparing students for rural a career.

Methods: Searches were conducted in seven databases. Data were extracted for author(s), year of publication, country, profession, educational strategy, and theoretical basis. Additionally, all direct quotes related to the study topic were extracted and thematically analyzed.

Results: In total, 21 articles were included and reviewed, and three themes were identified. First, rural practice-an educational double edge sword - demonstrates the beauty and challenges of rural practice. Second, placements are important for ALL learners regardless of background or future practice intent. Finally, rural practice brings unique opportunities and challenges that programs need to understand and prepare students for as part of the educational strategy.

Conclusion: Rural placements are a strategy that universities employ to promote and prepare students for rural practice. However, rural placements alone do not adequately prepare students for the challenges and opportunities of rural living and careers. Universities need to incorporate in-class curriculum components, highlight contributions of rural faculty, provide additional funds to support travel, housing, and a community liaison, and place students with friends in rural communities.

OB: April 24, 2022, 15:30 MST

OB 1: Leadership

Glen 201 – CTCC

OB 1-1

69372

Sanokondu - Building an international community of practice focused on healthcare leadership education for learners

Diane de Camps Meschino University of Toronto, **Ming-Ka Chan** University of Alberta, **Anne Matlow** University of Toronto, **Deepak Dath** McMaster University, **Jamiu Busari** Maastricht, **David Keegan** University of Calgary, **Graham Dickson** LEADS Global, **John(y) Van Aerde** Canadian Society for Physician Leaders

Background/Purpose: Internationally, healthcare providers must demonstrate leadership capabilities in practice and training. Programs, disciplines, professions, and organizations are investing in leadership education with significant overlap in effort & resource use. Common curricula for leadership training in undergraduate/postgraduate education sufficiently adaptable for use internationally have yet to be established. A community of practice built around this vision could help meet this global need. Our purpose is to describe the evolution of Sanokondu, a multinational community of practice dedicated to leadership education for healthcare learners.

Summary of the Innovation: The CanMEDS2015 review generated collaboration to design leadership training. Some of the collaborators formed Sanokondu to create a common leadership curriculum for postgraduate medical learners. Annual meetings on leadership education organized through the University of Toronto and Royal College were used to bring together stakeholders (patients, learners, educators, & leaders across the health professions). Through co-creation and feedback, a core group then created a multipronged approach to leadership education for healthcare learners. Key outputs include: - Open-access modules (using CanMEDS and LEADS frameworks): adapted for pharmacy/medical students, residents and faculty - Annual summit - Joint events with NASHKO, NVMO, LEADS Global and CSPL - Scholarship: peer-reviewed and invited workshops/presentations and publications - Using feedback and harnessing virtual learning advancements, creation of a) Curated resources for crisis leadership b) Three unique monthly opportunities for learning, unlearning, mentorship, networking and peer support

Conclusion: A growing community of practice has developed to help meet the need for leadership education for healthcare learners (www.sanokondu.com). Opportunity for partnership & collaboration continues to expand internationally.

OB 1-2

68836

Identifying the actual value of our work via a Theory of Impact: Stories from the field of education scholarship

Risa Freeman University of Toronto, **Kathryn Parker** University of Toronto, **Allia Karim** University of Toronto

Background/Purpose: Within complex systems, the true value of our work is often a composite of what we plan to achieve and how our work brings value in ways that could not have been predetermined. Yet, our methods of evaluating typically do not capture emergent outcomes. Evaluation can be leveraged to better understand how our interventions work to achieve planned and emergent outcomes. This presentation illustrates how we articulated a Theory of Impact. We will present the theory and argue that a Theory of Impact is best to maximize utility of information.

Methods: This program evaluation used a retrospective grounded theory process. We reviewed interview transcripts with 15 stakeholders of the OES to address the following questions; 1) What was the most significant change from engaging with the OES? 2) How did working with the OES enable these changes to occur?

Results: The OES identified several key moments in its evolution where the value of the evaluation process and its inclusion of emergent outcomes was uncovered. Underlying mechanisms were identified and a Theory of Impact was generated. The Theory of Impact illuminated a shift in education scholarship knowledge and practice through relationships between faculty, scientists and education leaders.

Conclusion: As education scholarship becomes a stronger focus in Family Medicine education programs, methods of evaluating the strategies to support these activities are needed that can account for emergent outcomes. By generating and iterating a theory of impact, Family Medicine educators can better understand the change that results from their interventions while taking changing context into account.

OB 1-3

69381

[National Orientation in Family Medicine Leadership Education Program (NOFMLE): Supporting Educational Leadership](#)

Viola Antao University of Toronto, **Lisa Graves** Western Michigan University Homer Stryker M.D. School of Medicine, **Aaron Johnston** University of Calgary, **Ivy Oandasan** University of Toronto, **Alison Eyre** University of Ottawa, **Eric Wong** Western University, **Jobin Varughese** McMaster University, **Tim Dube** Université de Sherbrooke, **Aleksandra Walczak** The College of Family Physicians of Canada, **Sara Bertrand** The College of Family Physicians of Canada

Background/Purpose: Family physicians are reluctant to consider educational leadership roles. Diligent leadership succession planning in family medicine (FM) is essential. FM leaders often get promoted into educational leadership positions with minimal preparation, guidance or support. The College of Family Physicians of Canada has taken steps to address this concern by developing and implementing an , annual National Orientation in Family Medicine Leadership Experience (NOFMLE).

Summary of the Innovation: The CFPC through its Section of Teachers created a leadership development opportunity (NOFMLE) that has evolved iteratively over 3 years since 2018. A cohort of junior/new educational leaders are invited from Departments of Family Medicine across Canada to build a leadership community of practice (CoP). NOFMLE is designed uniquely to highlight FM specific educational content, nurture, connect and grow creative and diverse leadership voices .Strategies including, gamification, integration of arts and humanities and reflection are utilized to encourage engagement, foster a CoP and, facilitate application of skills learned to individual workplace specific challenges. In keeping with program values, graduates are invited to join the committee for further quality improvements.

Conclusion: Participants in NOFMLE (80%) indicated no prior leadership training. Seventy -three percent indicated they were unsure but were willing to pursue leadership roles, given encouragement and support. Findings from this initiative related to self-perceived confidence, ability to perform leadership tasks, imposter syndrome , burnout, mentorship, and the importance of building sustainable leadership CoP. will inform those organizations/institutions interested in building leadership capacity .

OB 1-4

69400

[Successfully Piloting a Novel Pre-Clerkship Leadership Program: Foundations of Leadership](#)

Michael Aw University of Ottawa, **Ahmed Shoeib** University of Ottawa, **Craig Campbell** University of Ottawa, **Charles Su** University of Ottawa

Background/Purpose: Despite a demand for leadership training, this topic remains largely vacant from undergraduate medical curriculum. Consequently, we developed the Foundations in Leadership program, which emphasizes experiential learning and encourages participation through self-learning; small group exercises; and simulation learning. Here, we evaluate this program in this proof-of-concept study.

Methods: Sixteen first year medical students attended the 8-session program. Self-reported leadership competencies were collected pre and post-program. Furthermore, students participated in two video-recorded objective structured clinical exams (OSCEs). OSCEs were developed with content experts to test students' communication and problem solving skills. The OSCEs were evaluated by blinded third-party reviewers. Participant satisfaction and feedback was solicited anonymously and analyzed using qualitative methodology.

Results: There were significant post program increases in the following leadership domains: communication (P=0.0454), initiative (P=0.0066), self-development (P=0.0057), self-confidence (P<0.0001), team leadership (P=0.0002), collaboration (P=0.0235), impact and influence (P=0.0003), information seeking (P=0.0005), and relationship building (P=0.0006). Self-reported data suggests the program adequately delivered its learning objectives: leadership theory acquisition, enhanced knowledge of self, giving and receiving feedback, conflict-management, persuasion and advocacy skills. There are trends suggesting that OSCE performances may have improved in several measured domains. Students responded most positively to small-group discussion and simulated learning. There was high participant satisfaction with 94% of students recommending the program to a friend.

Conclusion: Foundations of Leadership represents an effective framework for leadership training, which may be used to enhance current leadership curriculum.

OB 1-5

69553

[A discussion of the 'meta' - the emergence of a research project about leadership in continuing professional development](#)

Morag Paton University of Toronto, **David Wiljer** University of Toronto, **Suzan Schneeweiss** University of Toronto, **Victor Do** University of Toronto, **Tharshini Jeyakumar** University Health Network, **Jane Tipping** University of Toronto, **Marta Guzik-Eldridge** University of Toronto, **Paula Rowland** University of Toronto, **Walter Tavares** University of Toronto, **Jerry Maniate** University of Ottawa

Background/Purpose: Rarely do we have the privilege to reflect on the mechanics behind an ongoing research project. As we seek to renew and reinvigorate, we reflect on actions, choices, assumptions, challenges, and opportunities of a research study on Continuing Professional Development (CPD) leadership.

Methods: This presentation centers around a project built on two premises: the advancement of CPD is reliant on good leadership and CPD leadership is underexplored in the literature. Our team sought to develop a research study: we designed an emergent research protocol, identified and refined our research question, conducted a scoping review, evaluated a CPD leadership program, interviewed CPD leaders, and used multiple qualitative research tools.

Results: This presentation will be an assembly of reflections, research meeting notes, and timelines brought together to expose the mechanics of this study. Building a research project when everything seems emergent and ever changing is complex and requires flexibility. Early in the process we shifted the focus of our research question, added team members, and added a literature review pilot prior to our scoping review of approx. 4000 citations. These steps improve the research while challenging timelines and team dynamics.

Conclusion: Reflecting on the research process is a valuable step in advancing science but a step that is often overlooked as we push on to the next research project. By reflecting on the choices and decisions we make helps us learn new things about our fields and ourselves, reinvigorate both the self and the systems in which we operate.

OB 1-6

69606

[Canadian Medical Student Leader Experiences -- A Phenomenological Study](#)

Henry Annan Dalhousie University, **Victor Do** University of Toronto, **Anna MacLeod** Dalhousie University

Background/Purpose: Despite being a competency in the CanMEDS framework there continues to be room to improve leadership development along the medical education continuum. Medical students have the opportunity to gain leadership skills by serving in elected representative roles locally, nationally and internationally. As little is known about the experiences of medical student leaders and how these roles may facilitate leadership development, we sought to uncover the essence of the experience of elected medical student leaders.

Methods: This was a qualitative phenomenological study. We conducted in-depth interviews with 12 learners who served in elected medical student leader roles from 2015-2019. We used thematic analysis to elucidate the essence of the medical student leader experience.

Results: Whether interviewees felt supported and valued by their faculties greatly influenced the nature of their leadership experience. Combined with the pressure of performing as a medical student, leaders often found that their leadership work came in conflict with their academics and personal lives. They cited lack of mentorship and a poor understanding of the scope of their work as barriers to navigating their roles. Despite the toll that leadership could take on them, interviewees felt leadership involvement made them better physicians.

Conclusion: Faculties play a critical role in shaping the experience of medical student leaders. A more in-depth understanding of student leadership roles, providing mentorship opportunities for medical student leaders and implementing policies that allow them to both meet their academic and leadership responsibilities, can augment the leadership experience and the overall development of these learners into well-rounded physicians.

OB 2: Black health & wellness / wellness

Glen 202 - CTCC

OB 2-1

69486

[Striving for greater equity: A national study of the experiences of Black Canadian medical students](#)

Johanne Mathieu Université de Sherbrooke, **Kikelomo Akinbobola** University of British Columbia, **Lolade Shipeolu** University of British Columbia, **Kien Crosse** University of Toronto, **Manon Denis-Leblanc** University of Ottawa, **Kimberley Thomas** University of British Columbia, **Salomon Fotsing** University of Ottawa, **Gaelle Bekolo** University of Ottawa

Background/Purpose: Black medical students have been consistently underrepresented in Canadian medical schools. Data on the impact of discrimination on their medical education remains limited. This cross-sectional study aimed to investigate the experiences of Black medical students across Canada.

Methods: A 63-item questionnaire around the domains of Inclusion and diversity, Wellness, Discrimination, Career advancement, and Diversity in medical education was sent to 128 Black medical students and first-year residents from all 17 Canadian medical schools via the Black Medical Student Association of Canada listserv. Frequencies and supplemental correlational Chi-square analyses with demographic data were obtained.

Results: 52 responses were obtained. Around 58.8% (30/51) of respondents had at least one personal encounter with discrimination in medical school. Discrimination was experienced in both clinical and academic contexts, notably from patients, peers, and hospital staff. There was a positive correlation between years in undergraduate medical education and exposure to discrimination [$X2$ (4, N=49)=17.939, p=0.001]. Respondents reported feeling included in academic (69.4%; 34/49) and clinical settings (66.7%; 32/48) and endorsed resilience in face of discrimination (61.5%; 16/26). However, a majority of respondents had negative experiences relating to reporting discrimination (76%; 19/25), their well-being (65.3%; 32/49), career advancement (79.5%; 35/44), sentiments of minority tax (85.7%; 42/49) and low diversity in medical education (64.3%; 27/42).

Conclusion: These findings show that discrimination has significant implications on the learning experience of Black medical students in Canada. This directly challenges the notion that Canadian medical schools are impervious to racism and highlights the need for advocacy and systemic changes to eliminate institutional racism.

OB 2-2

68045

[The #MeToo era in Medical Education: A first look at the epidemic](#)

Chaya Prasad Western University, **Kali Chiriboga** Western University, **Matt LaPlante** Western University, **Matt Zeller** Western University

Background/Purpose: Recent revelations of sexual misconduct (sexual harassment, SH, and/or sexual assault, SA) have been identified in multiple professional fields including the medical community. Behaviors in medical school tend to be replicated throughout a physician's career, including behaviors necessitating punitive actions1. Our study sought to investigate if sexual misconduct was prevalent in medical schools, barriers to reporting, as well as if these behaviors impacted medical students' education

Methods: After IRB approval, a cross-sectional electronic survey was distributed to medical students enrolled in 14 osteopathic medical schools via email during the 2018/19 academic year. Institution eligibility was

contingent on receipt of a letter of support from each medical school Dean. The survey link was sent to class presidents who then forwarded the survey to their respective student body. The survey contained a maximum of 23 questions depending on participants self-reported responses. Submission of the survey constituted informed consent

Results: Survey responses (n=1619) were received from 14.56% of original recipients. 54% of respondents were female, 44% male. 59.5% were in didactic education and 40.59% were in clinical education. 1 in 6 (17%) respondents experienced sexual misconduct in osteopathic medical school. Students were responsible for 52% of sexual misconduct events, preceptors were responsible for 19% of events, faculty were responsible for 11% of events, "other" were responsible for 7% of events and 12% of participants were not willing to disclose the perpetrator. Prevalence of SA was 4.9% and SH was 12.6%. Female student doctors constituted a greater proportion of victims of SH, 67.5%, and SA, 83.2% compared to their male student counterparts. 80.5% of victims did not report sexual misconduct to their institution. Top reasons for not reporting included: negative influence on career, being accused of overreacting, gaining a negative reputation, and fear that no action would be taken. Of respondents who experienced SA, 78.8% indicated it interfered with their education. Of respondents who experienced SH, 67.2% indicated it interfered. Of total respondents, 84.5% believe that a prior SA should be reported on a medical school application and 78.5% believe that prior SH should also be included.

Conclusion: This is the first pilot study surveying the prevalence of SA and SH, reporting rates, perpetrator status, and reporting barriers in medical school at a national level since the #MeToo movement began. There is little transparency about national prevalence of sexual assault and/or harassment in medical schools. The number of students in our survey whose education was negatively impacted by sexual misconduct equates to that of an entire medical school class. This barrier may cause further ramifications on a student's future career path, unequal gender representation in both leadership and certain competitive medical specialties, and a decrease in the overall quality of patient care. Future investigations should include longitudinal centralized monitoring, reporting modalities, and predictive analytics for medical school application screening tools.

OB 2-3

68638

Overshadowed by shadowing: Exploring how Canadian medical students experience shadowing

Ming Li University of Toronto, **Grace Xu** University of Toronto, **Paula Veinot** University of Toronto, **Maria Mylopoulos** University of Toronto, **Marcus Law** University of Toronto

Background/Purpose: Preclinical medical students commonly perceive shadowing as a beneficial career exploration approach. However, there is a paucity of research on the potential adverse effects of shadowing. We explored medical students' perceptions and experiences of shadowing culture to understand the role and impact on their personal and professional lives.

Methods: Individual semi-structured interviews were conducted with 15 second- and third-year medical students across Canadian medical schools via Zoom. Inductive qualitative analysis proceeded concurrently with data collection until saturation informing subsequent interviews. Data was iteratively coded and grouped into themes.

Results: Participants described a range of internal and external factors that molded their shadowing experiences and various tensions arising. Internal drivers of shadowing behaviour included: 1) aspiring to be the best and shadowing to demonstrate excellence, 2) shadowing for career exploration, 3) shadowing as learning opportunities for early clinical exposure and career preparedness, and 4) reaffirming and redefining professional identity through shadowing. External drivers were: 1) unclear residency match processes which position shadowing as competitive leverage, 2) faculty messaging that perpetuated student confusion around the intended value of shadowing, and 3) social comparison in peer discourse, fueling a competitive shadowing culture.

Conclusion: The tension between balancing wellness with career ambitions, as well as unintended consequences of unclear messaging regarding shadowing in the context of a competitive medical culture, highlight issues inherent in shadowing culture. Our findings will initiate system-level conversations to develop a healthy shadowing model that conserves previously explored benefits of shadowing while reinvigorating the learner environment.

OB 2-4

69328

Sexual assault and domestic violence: exploring the learning needs of family medicine residents

Daniela Keren Western University, **Adrienne Wakabayashi** Western University, **Susan McNair** Western University

Background/Purpose: Sexual assault and domestic violence (SADV) are important healthcare issues worldwide. Family physicians are uniquely able to provide comprehensive and longitudinal care to those experiencing SADV. However, emphasis on SADV training in Canadian family medicine (FM) residencies is declining, and FM physicians endorse insufficient comfort and competence when managing SADV cases. This study aimed to explore FM residents' learning needs, attitudes and ideas regarding SADV teaching in residency.

Methods: We conducted a qualitative in-depth interview-based study at Western University. We collected data from eight semi-structured interviews of first- and second-year FM residents, which were audio recorded and transcribed. We analyzed the data using reflexive thematic analysis.

Results: Participant characteristics included both international and national undergraduate medical training, and both rural and urban residency settings. Participants' learning experiences to date either positively or negatively influenced their competence regarding SADV. Intrinsic and extrinsic factors influenced their motivation to learn about SADV. Learning experiences were limited by disparate exposures and variable preceptorship. Perceived barriers included teacher, patient and learner discomfort, and relative unimportance of the topic to some. All participants felt inadequately trained and desired increased teaching regarding SADV, particularly through small-group learning and hearing patient stories.

Conclusion: Understanding FM residents' experiences and ideas regarding SADV teaching is critical for enabling residency programs to graduate future physicians who are equipped to care for this vulnerable population. In identifying key motivators and barriers to learning around SADV, this study provides a foundation for curricular development with respect to SADV.

OB 2-5

69441

[Healing the Healers : Efficacy of a brief online mindfulness-based intervention on the psychological wellbeing of healthcare professionals in South Africa](#)

Veena Singaram University of KwaZulu-Natal, **Nazia Osman** University of KwaZulu-Natal

Background/Purpose: The impact of a brief online mindfulness-based intervention (MBI) for healthcare professionals (HPs) amid a pandemic is largely unknown. The medical crisis brought on by COVID-19 is an unexpected global challenge at many levels. This study investigated the implementation and effectiveness of a brief online MBI on stress and burnout of a group of diverse multicultural HPs training and working during the COVID-19 crisis.

Methods: A mixed method framework was adopted. The quantitative data was analysed using descriptive analysis. Participants' qualitative experiences were interpreted using interpretative phenomenological analysis.

Results: Forty-seven participants took part in this study. The study found a statistically significant (p < 0.05) reduction in stress levels and emotional exhaustion as well as an increase in mindful awareness and feelings of personal accomplishment after the intervention. The participants' shared experiences were analysed in two parts. The pre-intervention analysis presented with central themes of loss of control and a sense of powerlessness due to COVID-19. The post-intervention analysis comprised themes of a sense of acquired control and empowerment through increased mindfulness.

Conclusion: The study found notably significant post-intervention changes. These were reduced stress levels, lower levels of emotional exhaustion, a feeling of being present and aware, and overall enhanced feelings of self-competence. Hence, a brief online MBI can be associated with reduced levels of stress and burnout and an increased sense of control and empowerment even in a healthcare crisis. The online Zoom platform facilitated a focus on the MBI practices and not on differences and diversity.

OB 2-6

69646

[Medical Improv in Psychiatry: a novel approach to enhancing communication and wellness](#)

Katherine van Kampen McMaster University, **Sandra Westcott** McMaster University, **Kayla Simms** McMaster University, **Hartley Jafine** McMaster University, **Teresa Chan** McMaster University

Background/Purpose: Communication is a foundational skill in medicine and a cornerstone of good psychiatric practice. Teaching communication skills transcends the role of didactic pedagogy in post-graduate medical education, and necessitates innovative educational design. Medical improv is a form of experiential learning that adapts applied improvisation principles to the healthcare setting and may enhance communication and teamwork skills.

Methods: Psychiatry Education through Play and Talk is a 5-week extra-curricular program offered to psychiatry residents training at McMaster. Sessions were held virtually due to COVID-19 and facilitated by a medical improv expert. Participants completed weekly session evaluations, exit surveys, and a final focus group. Stufflebeam's Context-Input-Process-Product (CIPP) model is used as an organizing framework for program evaluation, and Kirkpatrick outcomes include learner satisfaction, learning, and self-reported behaviour change.

Results: Participants enjoyed the program and noted benefits for their wellness, self-reflective capacity, and communication skills. Qualitative analysis revealed key themes in facilitating this process: experiencing joy, developing a sense of community, personal reflection and discovery, going "off script", and immersion in the present moment. 100% of participants would recommend the workshop to colleagues and be interested in future improv activities.

Conclusion: Communication is a fundamental skill for psychiatrists and medical improv may provide a novel tool to enhance its practice, along with other CanMEDS competencies such as medical expert, advocate, leader, collaborator, and professional. PEP Talks contributes to a small but growing body of literature about the utility of medical improv, and is the first program designed specifically for postgraduate psychiatry trainees.

OB 3: Transitions

Glen 203 - CTCC

OB 3-1

68491

[Mindsets of Early-Career Family Physicians: What Changed after Residency?](#)

Mao Ding University of Alberta, **Oksana Babenko** University of Alberta, **Sudha Koppula** University of Alberta, **Lillian Au** University of Alberta, **Olga Szafran** University of Alberta

Background/Purpose: Physicians with a mastery mindset are better prepared to learn, adapt, and succeed in the profession. Primary care clinicians in their early careers face unique challenges in establishing independent practice. The purpose of this study was to examine the mindsets of family physicians over the three years in practice following graduation from a competency-based medical education (CBME) residency program.

Methods: A longitudinal survey study of a family medicine (FM) resident cohort (n=70) at a large Canadian university was performed. Data were collected at the end of residency training, one and three years into clinical practice. In total, 52 (74%), 43 (61%), and 29 (41%) residents completed the questionnaire at each time point. Baranik et al.'s instrument was used to measure three types of mindsets: mastery - self-directed, intrinsic motivation towards learning; performance approach - motivation towards impression management; and performance avoidance - motivation towards ego-protection. Descriptive and multivariate analyses of variance were performed.

Results: Irrespective of the time in practice, mean scores were the highest on the mastery mindset and the lowest on the performance avoidance mindset (P < 0.001). With time, however, mastery mindset scores decreased (P = 0.04).

Conclusion: Family physicians trained in a CBME residency program continued to be mastery-oriented in the first three years of independent practice. While this finding is reassuring, the downward trend in mastery mindset scores is alarming. Future research is needed to determine how residency programs can better support graduating physicians in maintaining mastery mindset during the course of their professional practice.

OB 3-2

68950

"Everything new is happening all at once": A qualitative study exploring early career obstetrician/gynaecologists' preparedness for the transition to practice

Nicole Wiebe Western University, **Andrea Hunt** Western University, **Taryn Taylor** Western University

Background/Purpose: The transition from residency training into practice is associated with an increasing risk of litigation, burnout, and stress. Yet, we know very little about how best to prepare graduates for the full scope of independent practice, beyond ensuring clinical competence. Thus, we explored the transition to practice (TTP) experiences of recent Obstetrics and Gynecology graduates to understand potential gaps in their perceived readiness for practice.

Methods: Using constructivist grounded theory, we conducted semi-structured interviews with 20 Obstetrician/Gynaecologists who graduated from 9 Canadian residency programs within the last 5 years. Iterative data collection and analysis led to the development of key concepts and themes.

Results: Three inter-related themes encompassed our participants' descriptions of their TTP experience and preparedness. "Existing practice gaps" included areas of unpreparedness highlighted by new graduates. These fit within 5 domains: clinical experiences, such as managing unfamiliar low-risk ambulatory presentations; logistics, such as triaging referrals; administration, such as hiring or firing support staff; professional identity, such as navigating patient complaints; and personhood, such as boundary-setting between work and home. "External modifiers" represented various factors that either mitigated or exacerbated the identified practice gaps. Finally, the theme "Retrospective clarity" captured a shared sense among participants that they had underestimated many challenging realities of practice.

Conclusion: Existing practice gaps are multi-dimensional and perhaps not realistically addressed during residency. Instead, TTP mentorship and training opportunities must extend beyond residency to ensure that new graduates are equipped for the full breadth of independent practice.

OB 3-3

69193

Prepared to practice? The longitudinal challenges physicians face in their first year of practice.

Fareen Zaver University of Calgary, **Rachel Ellaway** University of Calgary, **Lara Cooke** University of Calgary, **Jason Lord** University of Calgary, **Jonathan Sherbino** McMaster University

Background/Purpose: The transition from residency to unsupervised practice is not a moment in time; it is a longitudinal process that can be fraught with challenges. We conducted a study to better understand the challenges faced at various points in the first year of unsupervised practice.

Methods: We conducted a realist study where we interviewed 20 participants across multiple specialties at three distinct points in time; one month before their transition to practice, one to two months into their transition and then nine months into their transition to unsupervised practice.

Results: Those starting unsupervised practice in a different location to where they trained faced the greatest challenges. They found it harder to navigate resources, develop new relationships and understand local culture and practice patterns. Although departments provided a range of supports (orientations, mentorship, shadow shifts etc), the timing of these supports varied (too late or too early). Those who had been employed on locum contracts had difficulty with leadership transparency, a lack of security, and difficulty understanding performance metrics and what they meant for their future careers. Teaching senior residents, managing learners in difficulty, and balancing the needs of learners without compromising patient care were also identified as challenges.

Conclusion: The transition from residency to unsupervised practice has many challenges. Transition to unsupervised practice has endless individual, interpersonal, institutional and national factors that can affect how each physician experiences it. This study has identified many new areas of concern with direct implications for key stakeholders including program directors, residency and department educators and department chairs.

OB 3-4

69373

Engaging Retired Physicians in a Novel Educational Program: Motivations and Experiences

Laurie Plotnick McGill, **Robert Sternszus** McGill, **Mary Ellen Macdonald** McGill, **Yvonne Steinert** McGill

Background/Purpose: Physician retirement has important impacts on medical learners and retiring physicians themselves. Retiring physicians take with them a wealth of knowledge, wisdom, and expertise, and can feel a loss of identity, lack of fulfillment and reduced social connectedness after leaving the institution. To address this, a novel educational program providing retired physicians with renewed teacher and mentor roles was implemented within a university-associated pediatric department. We sought to understand the retired physicians' experiences in this new program, including their motivations to academically reengage post-retirement.

Methods: Using a qualitative description design, semi-structured interviews were conducted with the retired physicians who participated in this educational program's inaugural year. We used Role Theory and Psychosocial Development Theory to design the interview guide and direct the thematic analysis. Iterative analysis of the interview transcripts was deductive and inductive.

Results: Seven of the eight inaugural retired physicians participated. Some participants highlighted that retirement was a challenge due to perceived abruptness of the transition. Retirement left participants with a desire to remain connected and to continue making meaningful and valued contributions. Despite being somewhat worried about their credibility and legitimacy as teachers without being clinicians, study participants perceived important benefits from the program (e.g., intellectual stimulation, social connectedness, sense of purpose).

Conclusion: Retired physicians' motivations to reengage academically and their experiences in this medical education program highlight the importance of supporting physicians during the transition to retirement and establishing formal programs to reengage retired physicians as teachers and mentors.

OB 3-5

69375

[Exploring Adaptive Expertise as a threshold concept: A qualitative study on the graduating physical therapy students' perception of expertise development](#)

Edwin Betinol University of British Columbia, **Glenn Regehr** University of British Columbia, **Sue Murphy** University of British Columbia

Background/Purpose: While expert clinical practice requires a flexible approach to problem solving, evidence shows that medical clerks tend to focus on knowledge acquisition as the key to expertise. It is not until residency training that learners shift their understanding of expertise towards developing adaptive approaches to clinical problems. This raises the question of whether the relatively short training programs for physical therapy are sufficient to enable this shift toward "adaptive expertise" prior to independent practice.

Methods: An exploratory qualitative study in the Constructivist Grounded Theory tradition was conducted, utilizing fourteen one-on-one semi-structured interviews with recently graduated physical therapists.

Results: Most participants were in a transitional state regarding their conceptualization of expertise, sometimes focusing on the acquisition of knowledge and routinization of practice, at other times on the need for developing more dynamic and adaptive problem solving approaches to patient care. These mixed responses were expressed in their framing of patient management, but also in their approach to continuing professional development and the value of intra- and inter-professional colleagues. Notably many participants suggested that the interview itself was a key impetus to their reflecting on these issues.

Conclusion: While it did not appear that their training had led participants to adopt and "adaptive expertise" mindset prior to graduation, they did appear well prepared to transition toward this mindset upon entering practice. However, spontaneous comments from participants suggest that this transition might be better supported though active guided reflection in addition to clinical engagement with patients and colleagues.

OB 3-6

69681

[Does exposure to global health electives in undergraduate medical education at Dalhousie University influence future residency and career choices?](#)

Emma McDermott Dalhousie University, **Shawna O'Hearn** Dalhousie University

Background/Purpose: For more than a decade there have been calls for increased global health education in undergraduate medical curricula. Further, there is an emerging trend in American medical schools that students with global health experience are more likely to purse primary care careers. We provide an update on the progress of Canadian medical education to incorporate global health, describe the extent of how global health elective experiences influence students' residency and career choices, and identify next steps for global health education at Dalhousie.

Methods: Building off our scoping review presented last year, a web-based survey was created for past Dalhousie Medicine students who completed an undergraduate global health elective in their fourth year of study through the Dalhousie Global Health Office. This survey had students reflect on their past global health experiences, rank the importance of global health in their residency placement decision, and comment on if and how they see global health being incorporated into their medical careers. We also conducted interviews to understand how global health electives contribute to a medical students' education and influence future careers.

Results: 21 medical students completed the survey. One emerging trend was that students felt they were personally gaining more from their international electives than their host countries, highlighting the need for reciprocity in international electives. These results re-assert the need for improved global health education, and current overreliance on international electives for global health education.

Conclusion: Moving forward, we hope this will help influence programming and curriculum decisions at medical schools across the country.

OB 4: Technology & education

Glen 204 - CTCC

OB 4-1

69608

[A Virtual Simulation-Based Communication Skills Workshop for Residents](#)

Leora Branfield Day University of Toronto, **Leah Steinberg** University of Toronto

Background/Purpose: Goals-of-care and advanced care planning conversations are associated with high-quality care for patients with serious illness. However, these important conversations often create distress among patients, clinicians, and healthcare teams. Moreover, although residents are frequently responsible for leading these conversations, they report feeling uncomfortable and unprepared, and desire more direct observation and feedback to master patient-centered communication skills.

Summary of the Innovation: We developed and led a series of 3-hour virtual communication simulation-based workshops for second-year internal medicine (IM) residents (n = 81). Each workshop provided opportunities for simulated practice of different patient-centered communication skills (e.g., listening skills, exploring illness understanding, responding to emotions). Prior to each workshop, residents completed preparatory reflection exercises and videos. During each workshop, we split residents into small groups in breakout rooms. Each group contained 1-2 trained facilitators and a standardized patient (SP) who portrayed specific case scenarios reflecting typical patient encounters. Residents took turns engaging in simulated conversation with the SP with time-outs to receive immediate coaching and constructive feedback from facilitators. Facilitated debriefs with guided feedback and self- and group-reflection followed.

Conclusion: In surveying residents to solicit feedback, we found that they strongly valued deliberate simulation-based practice of communication skills in emotionally complex situations, and perceived a strong benefit of direct observation and real-time feedback from coaches and peers. Residents described enhanced confidence and knowledge of patient-centered communication skills (e.g., formulation reflections, the use of silence, diffusing tensions) and desired additional virtual and in-person simulation-based practice. Simulation-based virtual workshops offer a novel way to enhance patient-centered communication skills.

OB 4-2

68752

[Barriers and facilitators to integrating podcasts into the family medicine curriculum: an exploratory qualitative study.](#)

Emma Glaser Université de Montréal, **Kathleen Rice** McGill, **Nicolas Fernandez** Université de Montréal

Background/Purpose: Medical podcasts are widely used and appreciated by residents and students. They are rarely formally included into the postgraduate curriculum. Studies have not explored why. This study aims

to explore how clinician-learners and clinical teachers perceive medical podcasts. We explore the barriers and facilitators to including podcasts into the family medicine curriculum.

Methods: A generic qualitative study using focus group interviews was performed. Four focus groups of approximately five participants each including either Family Medicine learners or teachers were held. Transcripts were analyzed using thematic analysis.

Results: Barriers to integrating podcasts into the curriculum were poor audio quality and the perception from teachers that podcasts are passive learning. Conversely, passive learning was perceived to be a facilitator for learners, who use passive learning to create momentum in their studying. Storytelling was seen as a powerful facilitator. Participants evoked the intimate storytelling potential of podcasts to discuss the non-expert CanMeds roles (eg., collaborator, professional, advocate, communicator) and the informal curriculum. Podcasts were imagined to be integrated into the curriculum by providing a clear resource list for learners and used as asynchronous content in a flipped classroom model.

Conclusion: This study illustrated an intergenerational tension in the approach to podcasts as an educational tool and the perceived place of passive learning in medicine. Furthermore, the study highlighted the potential of podcasts as a medium for teaching the non-expert CanMeds roles and formalizing the informal curriculum. Further research is needed to identify how to best use podcasts in the Family Medicine curriculum.

OB 4-3

69190

[Creating engaging educational podcasts for medical residents](#)

Jeff Goodes

Background/Purpose: Podcasting has become a popular medical education tool, particularly during this time of remote learning. Podcasts are an asynchronous pedagogical tool which can deliver relevant and reactive content, but there is an opportunity to further understand and define what makes an engaging podcast. Research focused on podcast use by medical residents, a learning cohort which is subject to extreme learning demands, and explored what qualities of an educational podcast increased engagement within this group.

Methods: The research was conducted through the lens of the technology acceptance model using case study methodology, drawing on aspects from meta-synthesis. The research considered the learning needs of a medical resident, then explored what qualities of a podcast were beneficial in increasing engagement of educational podcasts. Secondary research was paired with interviews with medical educators who create and/or use podcasts as a learning tool in a post-secondary medical education environment. Reading and analysis was framed by the concept of documentary analysis.

Results: Four elements of podcasts were identified by medical residents as being beneficial to this learning tool: flexibility, relevance, entertainment, personal connection. Practical recommendations were put forth on how to increase a podcast's engagement by maximizing these four qualities.

Conclusion: I posit that the recommendations can be applied not just to podcasts for medical residents, but for any cohort in a high-pressure, demanding environment with time constraints. For any learner, a podcast must deliver on its promise to be a relevant and engaging learning tool.

OB 4-4

69230

[Integration in Action: A Case Study Exploring the Impact of 3D Printed Anatomy Models on Cognitive Integration During Clinical Skills Training](#)

Jeffrey Cheung University of Illinois at Chicago, **Kristina Lisk** Humber College, **Genevieve Mailloux** Humber College, **Shannon Weekes** Humber College

Background/Purpose: Three-dimensional (3D) models are common teaching tools in health professions education, yet few studies have clarified how these tools may support clinical skills acquisition. These models may provide learning opportunities that help trainees make conceptual connections between relevant knowledges (e.g., cognitive integration) such as anatomy and clinical technique. We examined how 3D printed bones were used during a clinical skills lab on shoulder palpation.

Methods: Massage Therapy students (n=21) were placed in groups of 2 or 3 and given access to a 3D printed scapula, clavicle, and humerus. We used case study methodology to clarify the influence of the models on interactions between students, 3D models, and the instructor. We collected data through group observations (field notes), a student focus group (n=7), and an instructor interview. Two authors independently reviewed and coded the data, then together developed the final themes.

Results: We generated four themes: classroom interactivity, visualization of anatomy, integrating knowledge, and educational potential. Students and the instructor used the 3D models to facilitate interactions with one another (e.g., demonstrating palpation), visualize anatomy (e.g., placing models on their bodies), and to connect knowledge (e.g., palpating models while listening to the instructor). All participants expressed enthusiasm for the educational potential of the 3D printed models.

Conclusion: Our findings extend previous work by demonstrating a role for 3D printed models in supporting cognitive integration through social learning processes between peers and instructors. We also identify potential learning strategies and mechanisms that may guide educators in using 3D printed models during clinical skills training.

OB 4-5

69248

[The Athletic Therapy Interactive Concussion Educational Tool: Design, Development, and Next Steps](#)

Colin King Acadia University, **Loriann Hynes** York University

Background/Purpose: Our previous studies, in conjunction with other recent literature, have identified a considerable amount of variability in how healthcare professionals are taught to recognize, assess, and manage concussions. This suggests that there is a need for health professional educators to critically analyze how they currently teach about concussion assessment and management, while also exploring how effective pedagogical strategies could be implemented to help improve concussion care. Responding to these findings, we used an action research approach to design and develop the Athletic Therapy Interactive Concussion Educational Tool (AT-ICE).

Summary of the Innovation: The AT-ICE is a web-based educational tool that integrates various technologies and pedagogical strategies through contextually authentic concussion scenarios. Each scenario was designed to guide students through complete situational experiences that covered the entire continuum of concussion care: starting with on-field recognition of a potential injury, all the way through the concussion management process. Various technologies and pedagogical strategies were incorporated into each component of the tool to engage students in

the various types of knowledge, skills, and critical reflection required to effectively recognize, assess, and manage concussions.

Conclusion: A key aspect of any action research project is implementation and reflecting upon how such an innovation could create change in teaching and/or learning. Therefore, the next step of our research plan is to explore the impact of the AT-ICE tool on learning and teaching within the athletic therapy profession. Our future goal is to then use these findings to create similar resources for other health professions.

OB 4-6

69472

Learning AI, Making it Real: A Qualitative Study of the Needs of Medical Education Educators for Artificial Intelligence Program Development

Sarmini Balakumar Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Tharshini Jeyakumar** University Health Network, **Sarah Younus** University Health Network, **Megan Clare** Michener Institute, University Health Network, **Dalia Al-Mouaswas** Michener Institute, University Health Network; Ontario Institute for Studies in Education, University of Toronto, **Rebecca Charow** Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Azra Dhalla** Vector Institute, **Elham Dolatabadi** Vector Institute; University of Toronto, **Caitlin Gillan** University Health Network; Department of Radiation Oncology & Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, **Ethan Jackson** Vector Institute, **Nadim Lalani** Vector Institute, **Jane Mattson** Michener Institute, University Health Network, **Jacqueline Waldorf** Michener Institute, University Health Network, **Walter Tavares** Wilson Centre, University Health Network; University of Toronto, **Mohammad Salhia** Michener Institute, University Health Network; Ontario Institute for Studies in Education, University of Toronto, **David Wiljer** University Health Network; Department of Psychiatry & Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto

Background/Purpose: Artificial Intelligence (AI) is transforming the landscape of patient care and delivery. The National Academy of Medicine urges the development, deployment and evaluation of AI educational programs which can support safe, effective and sustainable use of AI in clinical practices. This study aims to understand the current landscape of AI education for health care professionals and recommendations for future education program development.

Methods: A qualitative descriptive approach was taken to explore the needs of educators and learners of AI training and educational programs targeted at clinicians, leaders and scientists in healthcare. Participants consisting of educators and learners were recruited from AI programs identified through an environmental scan. Virtual semi-structured interviews informed by the Kirkpatrick Barr framework were conducted and analyzed using inductive thematic analysis.

Results: A total of 17 interviews were conducted: 10 participants were instructors and 7 were learners. Three predominant themes emerged. These findings addressed the need for (1) practical experiences to support the transfer of learning, (2) multidisciplinary approaches to curriculum development and course delivery and (3) balancing learner needs and promoting engagement through a learner centered pedagogy when developing AI education programs.

Conclusion: Gaps in AI education can be mitigated through the integration of active and experiential learning activities with collaborative curriculum development using a learner centered pedagogy. The findings from this study can be used to inform the development of valuable future AI education programs in healthcare.

OBV 5: Pot Pouri

Virtual 1

OBV 5-1

69582

S'outiller pour mieux recevoir la rétroaction : Un nouveau modèle comportemental destiné aux apprenants en éducation médicale.

Diane Bouchard-Lamothe University of Ottawa, **Jennifer Rowe** University of Ottawa, **Sylvain Boet** University of Ottawa, **Manon Denis-Leblanc** University of Ottawa

Background/Purpose: Le partage de commentaires formatifs est inhérent au processus de supervision et l'acceptation de la rétroaction par les apprenants est une étape essentielle à l'apprentissage. Recevoir les commentaires du superviseur suscite des émotions et les accepter n'est pas facile. Plusieurs recommandations sont faites aux précepteurs sur comment partager la rétroaction aux apprenants et toutes soulignent l'importance d'encourager l'apprenant à interagir de façon active au processus de rétroaction. Bien que des études dénotent l'effet positif d'informer et de former les apprenants sur la rétroaction, peu s'attardent à leur réceptivité face à la rétroaction.

Summary of the Innovation: Ciblant l'acquisition d'une compétence personnelle destinée à mieux accepter les commentaires, nous proposons un nouveau modèle comportemental, nommé H.O.T.E., qui vise à guider les apprenants pour aborder la rétroaction avec un état d'esprit de croissance personnelle, associé à la position d'apprentissage. Plus précisément, le modèle présente un ensemble interdépendant d'attitudes et de comportements qui vise à faciliter la gestion des émotions et l'engagement dans le processus de rétroaction, afin d'enclencher le processus de réflexion nécessaire à l'apprentissage et permettre l'acquisition des compétences visées. L'acronyme H.O.T.E. rappelle aux étudiants les quatre éléments essentiels du modèle comportemental: l'humilité, l'ouverture d'esprit, la ténacité et l'explicitation. S'inspirant du courant de la psychologie positive, chacun d'eux est défini et justifié par des concepts théoriques connus. Pour mieux actualiser les composantes du modèle, l'utilisation de dialogue intérieur est adoptée afin de faciliter l'entrainement et l'adoption des comportements.

Conclusion: L'essence du modèle est ensuite discutée à la lumière de la littéracie en rétroaction dédiée aux apprenants.

OBV 5-2

69386

Patients as assessors in graduate medical education: A scoping review.

Roy Khalife University of Ottawa, **Manika Gupta** University of Ottawa, **Carol Gonsalves** University of Ottawa, **Yoon Soo Park** Harvard Medical School, **Janet Riddle** University of Illinois College of Medicine at Chicago, **Tanya Horsley** The Royal College of Physicians and Surgeons, **Ara Tekian** University of Illinois College of Medicine at Chicago

Background/Purpose: Although safe, effective, patient-centered care is central to competency-based assessment in graduate medical education, the patient voice remains largely missing. Patients' involvement in assessment is passive and perceived as prohibitive. To explore the nature of research activity and identify gaps, this scoping review evaluates patient engagement in the assessment of residents, including approaches for patient involvement and types of patient population, and educational outcomes related to patient ratings and feedback.

Methods: We conducted a scoping review guided by Arksey and O'Malley, Levac et al. and Thomas et al.'s frameworks. We searched two databases (MEDLINE® and Embase®) from inception until February 2021. Two authors independently screened, read and selected empirical studies of all designs that examined patient involvement in the assessment of residents or fellows. Findings are summarized descriptively and narratively.

Results: Patients can, and are willing to, be engaged in assessment regardless of the specialty or clinical setting, and their gender, race, ethnicity, or medical conditions. Patients may participate in assessment as a standalone group, with the Communication Assessment Tool being most frequently studied (9/41; 22.0%), or part of a multisource feedback process as reported in one third of studies (14/41; 34.1%). Patients generally provided high ratings but commented on the observed professional behaviors and communication skills in comparison to physicians who focused on medical expertise.

Conclusion: Involving patients in resident assessment is feasible and may offer unique insights that differ but complement physicians' assessments. How patient feedback can best contribute to judgements on competence attainment remains uncertain but under-studied.

OBV 5-3

69637

[An Environmental Scan of Patient Safety Reporting and Learning Systems in Community Healthcare for Multi-disciplinary Teams](#)

Eulaine Ma University of Toronto, **Wei Wei** University of Toronto, **Certina Ho** University of Toronto

Background/Purpose: Patient safety reporting and learning systems (RLS) have been increasingly employed globally as a tool for continuous quality improvement in healthcare via collecting, analyzing, and sharing patient safety incidents. Although multi-disciplinary RLSs are widely used in hospital practice, little is known about the use of similar systems in community care. We collaborated with the Manitoba Alliance of Regulatory Health Colleges (MARHC) and aimed to identify multi-disciplinary, community based RLSs that have been implemented in other jurisdictions.

Methods: An environmental scan was conducted via formal and grey literature searches. The formal literature search was performed on OVID MEDLINE and EMBASE databases. Titles and abstracts of journal articles were screened for relevance according to inclusion criteria. The grey literature search involved identifying websites and publications from regulatory authorities and policy institutes with a mission on patient safety, and personal communications with subject matter experts from the Canadian Patient Safety Institute and the International Medication Safety Network.

Results: A total of 629 articles were found between 2005 and 2020, from which RLSs in British Columbia (BC, Canada) and Spain were identified. Based on expert reviews and findings of a previous New Zealand environmental scan, the United Kingdom (UK) National Reporting and Learning System satisfied most of our search criteria. A summary of lessons learned from these multi-disciplinary, community based RLSs was also prepared.

Conclusion: The MARHC will benefit from further analysis of lessons learned from these RLSs as it explores a central repository for Manitoba healthcare professionals to collect and share learning from patient safety events.

OBV 5-4

69068

[What About Empathy? Exploration of a Podcast as Asynchronous Empathy Teaching Tool](#)

Giovanna Sirianni University of Toronto, **Dori Seccareccia** University of Toronto, **Irene Ying** University of Toronto, **Rebecca Stepita** University of Toronto, **Sarah Whyte** University of Toronto, **Allia Karim** Reserca, **Laura Beaune** Reserca

Background/Purpose: Empathy has been linked to better quality health care and positive outcomes for patients; however evidence suggests that empathy wanes among medical learners over time. Several educational interventions aimed at teaching empathy have been developed within the medical community. Podcasts are also increasingly being used as an adjunct teaching tool but have not been fully embraced into the health care curriculum. The About Empathy podcast was created as an educational tool for medical learners. The aim of this work is to explore how learners and educators engage with the About Empathy podcast in order to explore how this tool might be used as a complement to empathy-related learning in the current medical education curriculum.

Summary of the Innovation: Focus groups were conducted using a semi-structed interview guide with medical educators, residents, and students. Participants were asked to listen to 2 episodes of the podcast and then participate in a virtual focus group interview. Thematic analysis was used to analyze the focus group data which had been transcribed, coded and subsequently, generated high level themes.

Conclusion: High level themes included advantages of the podcast format as self-pacing, conversational and supporting 'learning on the go'. Participants felt the content of the podcast helped to create a space to practice empathy, in addition to helping develop capacity in compassionate communication and encourage skill development. Finally, participants supported shifting the use of the podcast from an adjunct tool to a part of the formal curriculum.

OBV 5-5

69540

[Not a linear spectrum: Distinguishing supportive and collaborative interdependence to better understand individuals' contributions to the healthcare team](#)

Lorelei Lingard Western University, **Michael Panza** Western University, **Carrie Rassbach** Stanford University, **Tamara VanHooren** Western University, **Stefanie Sebok-Syer** Stanford University

Background/Purpose: Interdependence - the ways in which individuals enable or constrain one another's performance in collaborative work - is not yet assessed in training, despite its importance for patient care. Recent work conceptualized trainee performances on a spectrum from independence to interdependence, but spectrum implies a linear, developmental trajectory which oversimplifies this phenomenon. A more robust conceptualization of interdependence is necessary if we intend to meaningfully assess it.

Methods: A constructivist grounded theory approach was used, sensitized by an existing theory of interdependence. We used purposive sampling to recruit 47 participants for individual interviews from the specialties of Emergency Medicine and Pediatrics in Canada and the United States. We sampled interprofessional healthcare team members (i.e., faculty, residents, allied health professionals and patients) who interact with trainees in clinical settings.

Results: Participants described two forms of interdependence. Supportive interdependence was triggered by a lack of expertise and was often described in relation to trainee encounters but not exclusively: expert

team members also encountered new knowledge or tasks that triggered supportive interdependence from other team members. Collaborative interdependence was triggered by a patient care need requiring resources outside a single individual's scope, such as a physician working interdependently with a social worker to explore home supports prior to discharge.

Conclusion: This refined conceptualization has implications for measurement. A measurement instrument that captures the spectrum of independent and interdependent performances, characterizes their relationship as nonlinear, and identifies whether interdependence is supportive or collaborative, could advance our ability to assess for individual and collective competence in clinical performances.

OBV 5-6

69659

Three Weeks of Team-Based Leaning Do Not Overload Undergraduate Students

Alexandre Lafleur Université Laval, **Mathieu Rousseau-Gagnon** Université Laval, **Marianne Côté-Maheux** Université Laval, **Dave Tremblay-Laroche** Université Laval, **Paul René De Cotret** Université Laval, **Yves Caumartin** Université Laval, **Alexandre Lafleur** Université Laval

Background/Purpose: Team-based learning (TBL) is a flipped-classroom approach requiring students to study before class. Fully flipped curricula usually have fewer in-class hours. However, for practical reasons, several programs implement a few weeks of TBL without adjusting the semester timetable. Students fear that they will be overloaded by the individual and collaborative study hours needed to prepare for TBL.

Methods: We implemented three consecutive weeks of TBL in a fifteen-week lecture-based course on the renal system. In-class time and assessments were unchanged for all courses. 459 first-year undergraduate medical students (229 in 2018; 230 in 2019) were invited to complete weekly logs of their individual and collaborative study hours during lectures and TBL, along with questionnaires on cognitive load and perception of the course. Our program changed from A to E grading in 2018 to pass-fail grading in 2019.

Results: Participants (n=324) spent a similar number of hours studying for TBL vs. lectures with a mean of 3.1 hours/week. Collaborative study was minimal outside class (median 0.1 hour/week). Results remained similar with pass-fail grading. If in-class time were reduced, 18% of participants said they would have used freed-up time to study for TBL. Studying for TBL generated similar extraneous cognitive load and lower intrinsic load compared to studying for lectures; students were less stressed, and maintained high levels of motivation and self-perceived learning.

Conclusion: Three weeks of lectures were replaced by TBL without reducing in-class time. Students did not report overload in study hours or in cognitive load.

OBV 6: Admissions

Virtual 2

OBV 6-1

69310

Who is underrepresented? A portrait of medical school applicants in the province of Quebec

Xin Wei Yan Altus Assessments Inc., **Karina Cristea** Université de Montréal, **Sébastien Béland** Université de Montréal, **Christian Bourdy** Université de Montréal, **Robert Gagnon** 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, **Jean-Michel Leduc** Université de Montréal

Background/Purpose: Sociodemographic information about medical school applicants is essential to identify underrepresented groups and inform admission policies in Canada. Ultimately, having diversity can help organizations improve patient care quality. The goal of this study is to provide a portrait of applicants to medical schools in the province of Quebec.

Methods: For the 2020-2021 admission cycle, Quebec medical school applicants had to take Casper, an online situational judgment test used to assess non-academic competencies. Applicants were then invited to complete a sociodemographic survey.

Results: Out of 7098 applicants who took Casper for the 2020-2021 admission cycle, 80.0% of applicants completed the sociodemographic survey. Overall, 38.7% were aged <20, 64.5% were female, 55.8% self-identified as white, 4.9% as Black, and 0.2% as Indigenous. 52.6% spoke French, and 28.6% spoke English at home. 55.4% of the applicants are from large cities/urban centers, 68.5% declared a family income above $75 000, and 78.6% had parents with education of a Bachelor's degree or higher. Almost half the applicants (41.4%) did not have part or full time employment before age 18.

Conclusion: This study provides the first sociodemographic portrait of applicants in the province of Quebec. It highlights that most medical school applicants in Quebec are female, come from high-income household, self-identify as white, and live in large cities/urban centers. This portrait of applicants will need to be compared to those admitted in medicine to inform if the admission process might be causing underrepresentation of certain groups. Furthermore, there is a need for longitudinal data collection to document these trends.

OBV 6-2

69304

Does Casper predict medical school performance?

Xin Wei Yan Altus Assessments Inc., **Genevieve Lemay** University of Ottawa, **Timothy Wood** University of Ottawa

Background/Purpose: Increasingly the admission process at Canadian medical schools have been placing more emphasis on measures of holistic decision making like situational judgment tests (SJT), such as Casper. While Casper has demonstrated that it can produce reliable scores, little is known regarding its relationship with in-program measures. This study aims to understand the associations between Casper at admissions and in-program measures across the 4 years of medical education at University of Ottawa.

Methods: Student data (n=145) was retrospectively analyzed. Admissions data including interview score, Casper, and wGPA were compared to course grades, clerkship ratings and OSCE scores collected during training.

A general linear regression model was used to predict the in-program grades by using the admission metrics. As the in-program grades are all dependent measures; a separate regression model was done for each

Results: Casper was able to significantly predict OSCE scores on three exams. Physician Skills Development (PSD) attempted during second year, Teaching and Testing (TNT) attempted at the start of clerkship, and Comprehensive (COMP) attempted at the end of clerkship. With regards to PSD (p = 0.003, r2 = 0.06) and TNT (p = 0.001, r2 = 0.09), only Casper was a significant predictor. With COMP, both Casper (p=0.007, r2 = 0.10) and wGPA (p=0.02, r2 = 0.10) were significant predictors. No other significant predictions were found.

Conclusion: These results suggest that Casper during admissions may be able to predict in-program metrics such as OSCEs. The presentation will also include potential mechanisms, as well as interaction effects in these regression models.

OBV 6-3

69337

Evaluating the Queen's University Accelerated Route to Medical School (QuARMS)

Leslie Flynn Queen's University, **Heather Braund** Queen's University, **Britney Lester** Queen's University, **Nany Dalgarno** Queen's University

Background/Purpose: The Queen's Accelerated Route to Medical School (QuARMS) pathway provides a unique process for entry to medical school at Queen's University. Since 2013, the pathway has offered a selected group of 10 high school students an innovative two-year curriculum that culminates with admission to medical school. This qualitative program evaluation of QuARMs aims to determine the extent to which (i) the pathway meets the needs of its stakeholders, (ii) the pathway was implemented as intended, (iii) the pathway is achieving its goals, and (iv) the value exceeds the costs, as well as identify its strengths, weaknesses, and recommendations.

Methods: Data were collected between 2019-2021 through interviews with key stakeholders (n = 42) including undergraduate students (QuARMS and Non-QuARMS), medical students (QuARMS and Non-QuARMS), and program leaders. Interviews elicited data about the academic and non-academic functions of the pathway. All interviews were audio-recorded, transcribed verbatim, and analyzed thematically using NVivo.

Results: Five themes emerged: 1) Goals and Objectives, 2) Implementation, 3) Outcomes, 4) Recommendations, and 5) Recent pathway changes. Highlights include the goal to attract the brightest and best students, the value of mentorship, and recommendations made regarding the admission process, the curriculum, and the need for additional support for students. Ongoing evaluation was also recommended.

Conclusion: This presentation highlights an innovative pathway to accelerate admission into medical school as undertaken by one institution. The program evaluation provides unique perspectives across a variety of stakeholder groups. Further, the presentation would emphasize the value of conducting program evaluations to inform ongoing refinement of the program.

OBV 6-4

69390

Creating Space: A Quantitative Study Academic of Backgrounds in Medical School Applicants

Tom Rosenal University of Calgary, **Martina Kelly** University of Calgary, **Ian Walker** University of Calgary

Background/Purpose: Medical schools encourage applications from students with diverse backgrounds, including humanities. This study characterized academic preparation of applicants and compared how those with different backgrounds progressed through admission.

Methods: Retrospective quantitative study of student applications, to University of Calgary 2015-2019. Students were grouped by number of course credits in accordance with Association of American Medical Colleges (AAMC) categories. Data included demographics, degrees, Medical College Admission Test (MCAT) scores, Grade Point Averages (GPA) qualifications ('file review') and interview performance.

Results: Of 7,048 applications, mean age 24 years, 54% female. Mean MCAT 508, GPA 3.74. Of applicants, 24% had Masters, 3% PhDs. The most common academic background category was specialized health sciences (35%), with bioscience 15% and humanities and social science tied at 5% each. 6058 (86%) had no humanities course credits; 398 (6%) no biosciences. File review resulted in an interview offer for 2,440 (35%), with no gender difference. Of those without humanities credits, 2077 (34%) were offered interviews. Of those without bioscience credits, 141 (35%) were offered interviews. Results for all interviews were that 1,309 (54%) were offered a position - 59% women and 48% men. For those without humanities credits 1094 (53%) were offered a position and for those without biosciences 67(47%).

Conclusion: Students with a non-science background were poorly represented as applicants. However, such students, fared similarly in the admission process to those with any other preparation. Findings indicate the need to promote medical school to non-science students and reassure them of comparable chance of success.

OBV 6-5

69420

Towards a Pan-Canadian Socioeconomic Measure for Canadian Medical Schools

Sara Ahmed University of Toronto, **Maria Maqsood** University of Toronto, **Rya Buckley** University of Toronto, **Milca Meconnen** McMaster University, **Arinze Ochuba** McMaster University, **Fatima Sabet** York University, **Simisolaoluwa Olapade** McMaster University, **Ike Okafor** University of Toronto, **Mark Hanson** University of Toronto

Background/Purpose: The Association of Faculties of Medicine of Canada is committed to increasing admission of students with low socioeconomic status (SES). A Pan-Canadian measure and threshold for low SES advances that goal, as it can reduce barriers among disadvantaged applicants and assists in monitoring program outcomes for low SES applicants. Our study reviews variables and measures used to define SES among Canadian medical school applicants, to advance the debate on the value of a Pan-Canadian SES measure and threshold.

Methods: A systematic literature search was conducted in the database MEDLINE using broad search terms to ensure high search sensitivity. Articles were screened using title and abstract review followed by a full text review for inclusion.

Results: We included 11 out of 4366 articles (0.25%), indicating limited research on this topic. The most recognized SES variables were parental income, education, and occupation. Parental occupation status was the only variable measured using validated scales. Postal code during high

school was used as a proxy for SES variables including median neighbourhood income, rurality, and northern status. Other identified variables were race, ethnicity, and Indigenous status.

Conclusion: There are no validated SES measures that can be readily implemented Canada-wide. Postal code is promising as it is a proxy for various Canadian specific SES variables, enabling a definition that captures SES intersectionality. The validity and sensitivity of using postal code as a SES metric and predictor of household income needs to be studied. Enhanced research is needed to enable equitable SES representation in medical schools.

OBV 6-6

69512

A National Survey of Canadian Resident Matching Service (CaRMS) Applicants' and Selection Committee Members' Perceptions of the Virtual Residency Interviews during the COVID-19 Pandemic.

Rosephine Del Fernandes Queen's University, **Nicole Relke** Queen's University, **Eleftherios Soleas** Queen's University, **Clementine Janet Pui Lui** Queen's University, **Boris Zevin** Queen's University

Background/Purpose: All CaRMS R1 residency interviews were conducted virtually for the first time in 2021 due to the COVID-19 pandemic. We explored the perceptions of applicants and selection committee members regarding virtual interviews and provide recommendations for improvement.

Methods: We conducted a cross-sectional study of CaRMS R1 residency applicants and selection committee members via survey emails to all English-speaking Canadian medical schools. Surveys were distributed after match day to CaRMS applicants and after the rank-order deadline to selection committee members. Close-ended items were described, and open-ended items were thematically analyzed.

Results: A total of 122 applicants from 15 schools and 400 selection committee members from all R1 programs responded to the survey. The most helpful mediums employed by applicants to learn about residency programs were program websites, information on the CaRMS/AFMC websites, and online videos created by programs. Of all types of virtual interviews, panels were preferred for its ability to engage conversations, showcase applicants, and connect with multiple interviewers. 193/380 (51%) of selection committee members and 90/118 (76%) of applicants preferred virtual over in-person interviews. Recommendations to improve the virtual interviews include standardization across programs in terms of scheduling, video software, technological support, and equipment. More opportunities to learn about programs should be offered and close-knit informal events, such as virtual townhalls with program directors and residents, are preferred.

Conclusion: Perceptions of virtual CaRMS interviews were favourable among applicants and selection committee members. Recommendations from this study should be reviewed to improve the process should virtual interviews continue.

OBV 7: Assessment

Virtual 3

OBV 7-1

68946

Words Matter: Using Automated Text Analysis to Explore Language Use Patterns in Narrative Comments describing Medical Students' Clinical Performances

Ulemu Luhanga Emory University School of Medicine, **Danielle Sargeant** Rollins School of Public Health, Emory University, **Elizabeth Greer Spradling** College of Arts and Sciences, Emory University, **Tricia Crescent Alcid** Rollins School of Public Health, Emory University, **DeJuan White** Emory University School of Medicine

Background/Purpose: Research has shown narrative comments used to describe clinical performance can reveal systematic and deleterious differences in language used among specialties. The purpose of this study was to use automated text analysis to identify frequently used words to describe medical students' clinical performance and to determine the emotional valence (i.e., positive, neutral, or negative) of narrative comments from 7 clerkship courses.

Methods: We used R software to analyze 5515 comments for medical students who completed clerkship courses during 2019-20. For text mining, we used tm package to calculate word/stem frequencies and for sentiment analysis, we used SentimentR package to calculate emotional valences.

Results: Across courses high frequency words/stems included great, team, will_, and well_. Unique words included help in Surgery and Obstetrics/Gynecology courses; present_ in Internal Medicine and Critical Care courses; excel_ in Adult Primary Care and Neurology courses, and interview and clinic in the Psychiatry course. 5384 (97.6%) comments were coded as positive; 59 (1.1%) neutral comments were related to "NA" or duplicate requests; and 72 (1.3%) comments were coded as negative. Negative comments were categorized into two: "no significant contact" and critical comments about students' work ethic, predominantly from Surgery and Obstetrics/Gynecology courses.

Conclusion: Although comments were generally positive, we found differential patterns in language usage across specialties. Given our findings of negative comments arising primarily from surgical specialties and considering recent literature highlighting perceptions of mistreatment vary among specialties, further investigation is needed to examine language usage patterns by student demographics.

OBV 7-2

69022

Faculty and Resident Perceptions of the Relationship Between Continuity of Supervision and Assessment

Ann Lee University of Alberta, **Lihani Du Plessis** University of Alberta, **Shelley Ross** University of Alberta

Background/Purpose: Research from undergraduate medical education (UME) longitudinal integrated clerkships suggests continuity of supervision (CoS) has benefits for assessment. At the postgraduate medical education level, researchers described that CoS relationships likely differ from those at the UME level. This study explored faculty and resident perceptions of CoS on assessment. This understanding is important if we are to ensure that programs are designed to collect robust assessment data particularly for summative decision-making.

Methods: We conducted semi-structured qualitative interviews using a constructivist grounded theory methodology. Data was collected from a purposive sample of preceptors and residents within the Family Medicine

residency program at the University of Alberta. Interviews were recorded and conducted through Zoom, then transcribed. The qualitative data was analyzed iteratively using thematic analysis to identify major themes.

Results: Participants indicated that CoS was important to the preceptor-resident relationship. Resident perceptions focused on the relationship in the context of learning, while preceptor perceptions were more concerned with how the relationship contributes to the assessment process. Both preceptors and residents described risks and benefits of CoS on assessment. In addition, both groups reported that CoS influenced the ability to provide feedback, and the quality and type of feedback provided.

Conclusion: Our findings imply heterogeneity in CoS relationships, and participants reported that the type of assessment information generated will depend on the type of CoS relationship. This supports the inclusion of assessment data from different types of relationships in an effective assessment system.

OBV 7-3

69348

MyOnCall Pager App: Collecting validity evidence for assessment of clinical decision-making

Kameela Alibhai University of Ottawa, **Nada Gawad** University of Ottawa, **Isabelle Raiche** University of Ottawa, **Heather McDonald** Western University

Background/Purpose: Clinical decision-making (CDM), an important skill to ensure patient safety, is infrequently practiced and assessed. The MyOnCall (MOC) Pager App, informed by modern decision-making theory, allows learners to practice CDM by answering simulated pages. This study collects validity evidence for the MOC Pager questions through response process and correlation with level of training.

Methods: Cognitive interviews were conducted with senior residents (SR) regarding 15 sample pages. Interviews were coded and analyzed in duplicate. Fifty pages, each consisting of a management question and CDM question, were then administered to SR, junior residents (JR), and medical students (MS). An answer key was developed using SR responses, which categorized CDM responses as 'best', 'safe', 'unsafe' or 'overly cautious'. MS and JR responses were compared using Mann-Whitney U tests and individually analyzed.

Results: Cognitive interviews identified problems with response matching and CDM response options were changed accordingly. Significant differences between MS and JR scores for the median number (IQR) of correct management questions [35.0 (2.00) vs 39.5 (3.75), p=0.006] and 'best' CDM responses [17.5 (8.75) vs 25.0 (2.50), p=0.002] were found. Individual response patterns identified outliers in the proportion of 'unsafe' and 'overly cautious' responses selected, with some demonstrating a wide range of management scores.

Conclusion: Preliminary validity evidence rectified response matching issues and demonstrated that the MOC Pager questions discriminate between MS and JR in terms of appropriate management and 'best' CDM responses. Individual analysis captured learners' unique CDM patterns. The MOC Pager questions may serve as an adjunct to clinical training and formative CDM assessment.

OBV 7-4

69496

Quality of narratives in assessment: An evidence-based approach for identifying quality indicators

Molk Chakroun Université de Sherbrooke, **Vincent Dion** Université de Sherbrooke, **Kathleen Ouellet** Université de Sherbrooke, **Ann Graillon** Université de Sherbrooke, **Valérie Désilets** Université de Sherbrooke, **Marie-anne Xhignesse** Université de Sherbrooke, **Christina St-Onge** Université de Sherbrooke

Background/Purpose: Narratives are increasingly used in assessment to document student performance and to make important decisions about student progress. However, little is known about how to document their quality, as traditional psychometric analysis cannot be applied. The purpose of this study was to generate a list of quality indicators for narratives, to identify recommendations for writing quality narratives, and to document factors that may influence the quality of narratives used in higher education assessments.

Methods: We conducted a scoping study using Arksey & O'Malley's approach. The search strategy was run in six databases identified 690 articles. Two team members screened all abstracts then papers for inclusion, then they extracted numerical (e.g., year and place of publication) and qualitative data (e.g., quality indicators, recommendations). The numerical data were summarized using descriptive analysis. Thematic analysis of the qualitative data was conducted in iterative phases until consensus was reached on the interpretation of the results.

Results: We included 47 articles. Thematic analysis allowed us to identify seven quality indicators and 12 recommendations for writing quality narratives. We also identified three factors (the student and assessor relationship & the local feedback culture, the time required for direct observation and to complete the task of providing narratives, and the assessors' abilities and ways to enhance them) that can either increase or decrease the quality of narratives used in assessments.

Conclusion: Providing good quality narratives will reinforce appropriate documentation of a student's performance and facilitate sound decision making about their progress.

OBV 7-5

69595

Resident and Preceptor Perceptions of Assessment: A Qualitative Study

Tara McGregor Queen's University, **Mary Martin** Queen's University, **Karen Schultz** Queen's University, **Brent Wolfrom** Queen's University, **Arlan Walsh** Queen's University, **Nancy Dalgarno** Queen's University

Background/Purpose: Workplace-based assessments (WBA) are used to document formative feedback and inform summative assessment for residents. Though one WBA per half day of learning is suggested, there is a dearth of literature to inform the optimum number to support learning. This study explores perceptions of Family Medicine (FM) residents and preceptors on the optimal quantity and quality of WBA for learning.

Methods: Qualitative study consisting of interviews with preceptors and focus groups with residents at a FM residency program in Ontario. Data was analyzed thematically through open coding in NVivo.

Results: Ten preceptors and seven residents participated. Five themes emerged: purpose of WBA, current and optimal frequency, factors affecting frequency, content, and perceptions of WBA. Preceptors and residents believed the purpose of WBA was to provide feedback, document, or fulfill departmental requirements. One half of preceptors reported meeting the suggested frequency, however most residents reported receiving fewer than this, particularly in second year. Some

preceptors felt one WBA per half day is optimal for resident learning, though others, and most residents, felt this is too frequent. Logistics, resident performance and preceptor habits/beliefs influenced frequency of WBA. Residents and preceptors agreed the most valuable WBA feedback is specific or new information. Residents found WBA with vague or only positive feedback the least valuable. Residents and preceptors agreed that feeling pressured to meet the recommended frequency contributed to dissatisfaction.

Conclusion: Results of this study will inform best practice for resident assessment and help to determine the optimal frequency of WBA in FM residency programs.

OBV 7-6

69612

Value added but not intended: A 2-year longitudinal study of the evolution of academic advisor and resident relationships

Lynfa Stroud University of Toronto, **Zachary Feilchenfeld** University of Toronto, **Amy Miles** University of Toronto, **Dominique Piquette** University of Toronto, **Chris Watling** Western University, **Ryan Brydges** University of Toronto, **Shiphra Ginsburg** University of Toronto

Background/Purpose: To help residents synthesize and use increasing assessment data within Competency by Design (CBD), many residency programs have implemented a faculty Academic Advisor (AA) role with the intent of coaching over time. To determine if such programs are meeting goals, we explored the longitudinal evolution of dyadic relationships between AAs and residents over 2 years.

Methods: We individually interviewed participants from 9 dyads at four points across residents' first two years of Internal Medicine residency. Transcripts were analyzed using constructivist grounded theory.

Results: We analyzed 29 resident and 26 AA interviews and identified three themes. Trust and Relationship Building: was impacted by the passage of time and AAs' perceived evaluative role, presence in the clinical setting, alignment with resident, and "fit"; yet residents still felt it critical to "save face" even with trusted AAs. Beyond Coaching and CBD: rarely was the AA perceived as a coach, and instead fulfilled numerous other functions for residents and attended to much more than assessment data, which aided relationship building. Value Added: while many participants valued the ongoing relationship, the extent to which value aligned with intended purpose was unclear. Greater CBD-related value was perceived at earlier stages of training, for underperforming residents, and for those who embraced self-reflection and aspirational goals.

Conclusion: Programs have invested heavily in CBD; therefore, it is critical to understand these interventions and their impact. This study expands our understanding of longitudinal relationships intended for coaching in medical education and questions if current models are meeting this intent.

OBV 8: Relearning patient perspectives

Virtual 4

OBV 8-1

69533

Mind the Gap: Co-designing a Patient Resource with Immigrants to Bridge Patient-Provider Cultural Differences

Katherine Yu University of Calgary, **Zachary Hong** University of Calgary, **Julia Robertson** University of Calgary, **Ashna Maredia** University of Calgary, **Aleem Bharwani** University of Calgary

Background/Purpose: Although immigrants are healthier than the general population, their health often deteriorates over time. The

multifactorial causes for this deterioration include language, cultural differences, and navigating a new healthcare system.

Summary of the Innovation: We co-designed a patient resource to bridge socio-cultural perspectives between immigrant patients and physicians during care; co-design participants included immigrants, community organization representatives, and physicians. We conducted three sets of focus groups (needs assessment, thematic analysis, tool design) with five participants each from the Filipino, Indian and Chinese communities in Calgary (n = 15) over Zoom video conference platform. We recruited participants via an online patient engagement posting and word-of-mouth. Focus group data and iterative feedback informed the co-design of a Calgary-based immigrant healthcare system resource. This resource assists immigrants prior to and during their interactions with healthcare professionals in primary care settings by prompting them with commonly asked questions and tips. Posters, worksheets, and QR codes were created, translated, and trialed among various healthcare settings and immigrant services. Utility, ease of use, and satisfaction with the resource were assessed through mixed methods surveys.

Conclusion: Our co-designed immigrant healthcare resource was received favourably, and improved immigrants' confidence when self-advocating and navigating healthcare services. It was learned that the barriers faced by immigrants in Calgary are similar to those faced by non-immigrants, but are greater in magnitude due to interplay with language barriers and pre-existing assumptions regarding Canada's healthcare system. In the future, we aim to scale up and distribute this resource for use in other healthcare and medical education settings.

OBV 8-2

69342

Identifying Challenges and Pitfalls Between the Physician and LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer) Patient Interactions: A Path to Improving Medical Education

Farhan Mahmood University of Ottawa, **Sahar Razmjou** University of Ottawa, **Loree Boyle** University of Ottawa, **Hugh J McMillan** University of Ottawa, **Paul MacPherson** University of Ottawa

Background/Purpose: While the inclusion of sexual health curricula in medical school can mitigate implicit bias and improve confidence when providing care to lesbian, gay, bisexual, and transgender (LGBT) patients, most Canadian medical schools provide only a few hours of training in this area. Our goal was to assess knowledge and self-reported confidence and comfort levels of medical students and residents providing care to LGBT patients.

Methods: University of Ottawa medical students (3rd, 4th year) and residents (all programs and all years) were invited to complete a questionnaire to: 1) provide answers to four clinical scenarios and; 2) report their self-confidence levels providing care to LGBT patients.

Results: 46% of the 93 respondents felt that their medical education did not adequately prepare them to care for LGBT patients. While most respondents were comfortable caring for lesbian (79.8%), gay (73.4%), and bisexual (78.5%) patients, only 39.3% were comfortable caring for transgender patients. Confidence levels were higher for gay youth and lesbian patient scenarios but lower for the transgender patient and pre-exposure prophylaxis (PrEP) scenarios. When comparing respondents' answers to the clinical scenarios to their confidence, responses for the gay and lesbian patient and PrEP scenarios had the lowest concordance indicating trainees overestimate their confidence. Knowledge was high for the transgender patient scenario.

Conclusion: Education in medical school and residency may benefit from additional teaching or clinical exposure to improve comfort and

knowledge, particularly for trans-patients. Areas for improvement could include: providing culturally sensitive sexual health education, recognizing heteronormative biases and better understanding medical transitioning for trans-patients.

OBV 8-3

67889

"Patients are the people who teach me the most" - Exploring resident perspectives on the development of physician-patient communication skills

Gabriel Burke University of Toronto, **Shiphra Ginsburg** University of Toronto, **Lindsay Melvin** University of Toronto

Background/Purpose: Physician-patient communication training is a vital component of medical education. Despite extensive literature on the efficacy of various communication training interventions, little is known about how residents believe they learn to communicate with patients. We sought to understand resident perspectives on existing communication training and on their personal communication skills development.

Methods: We conducted one-on-one interviews with 15 Internal Medicine residents from all years of the University of Toronto's Internal Medicine program. Residents were asked to reflect on communication skills development and their experiences with different methods of communication training. Interviews were conducted and analyzed iteratively using constructivist grounded theory.

Results: Residents credited the majority of their skills development to self-reflection on unsupervised interactions with patients, without guidance from an attending. Attendings' contributions were primarily through role modelling, with little perceived learning coming from direct feedback. This was partly explained by residents' proclivity to alter their communication styles when observed, rendering feedback less relevant to their authentic practice, and by residents generally receiving feedback lacking in constructive features. Time constraints on inpatient services led many residents to develop communication styles that prioritized efficiency over patient-centeredness, which residents recognized as discordant with the tenets of medicine.

Conclusion: These findings suggest current models of communication training and assessment may lack validity due to overreliance on observation, which fail to unearth the authentic and largely self-taught communication habits of residents. Further research is required to ascertain the feasibility and potential value of other forms of communication training and assessment, such as through patient feedback.

OBV 8-4

69292

Where's Waldo (aka the patient) in longitudinal coaching?: Exploring dialogue and goals in resident - coach sessions

Laura Farrell University of British Columbia, **Cary Cuncic** University of British Columbia, **Wendy Hartford** University of British Columbia, **Rola Ajjawi** Deakin University, **Rose Hatala** University of British Columbia

Background/Purpose: Within Competency-Based Medical Education, academic coaches meet iteratively with residents to discuss relevant feedback and assessments, co-construct goals, and assess whether those goals have been reached. The literature is limited regarding how to best co-construct goals longitudinally within the coaching relationship. We therefore built on current coaching theory by exploring coaching relationships between resident and faculty, in particular around goal development.

Methods: After an initial faculty workshop including skills for goal co-construction, six internal medicine coach-resident dyads audiotaped their coaching meetings over a one-year period. Coaching meetings and exit interviews exploring the coaching relationship were audiotaped and transcribed. All transcripts were analyzed thematically using goal co-construction as a sensitizing concept.

Results: Goals identified across dyads were similar with a heavy focus on study skills. Other topics included developing senior resident skills and career planning, but goal development around patient care competencies such as communication and professionalism were infrequent. Co-construction mainly focused on feasible plans to meet goals with coaches providing input on realistic expectations in training. Coaches were unclear if interactions benefited residents despite residents endorsing the value of having a safe space for discussions.

Conclusion: In exploring goal development in the coach-resident relationship, it became apparent that conversations focused mainly around how to be a trainee rather than how to be a better doctor. This may be because academic coaching provides a space separate to clinical work to focus on the trainee-specific challenges. Going forward, how patient-centered competencies are developed through these discussions needs to be further explored.

OBV 8-5

69298

Patient Engagement in Medical Trainee Selection: A Scoping Review

Mark Hanson University of Toronto, **Celeste Pang** University of Toronto, **Elena Springall** University of Toronto, **Kulamakan (Mahan) Kulasegaram** University of Toronto, **Kevin Eva** University of British Columbia

Background/Purpose: Whether motivated by merit or social accountability, medical trainee selection committees choose methods based on what they believe will best serve patients. Less clear is how patients contribute to these deliberations, creating the risk of disconnect between selection and what patients' value. Better understanding of how medicine engages patients in the context of trainee selection would strengthen practices in this regard.

Methods: In 2017, we conducted a comprehensive search of Ovid MEDLINE, Ovid MEDLINE epub Ahead of Print, In-Process & Other Non-Indexed Citations, using a mixture of MeSH headings and keywords to examine patient engagement in medical trainee selection. In 2019, a citation search of the original databases as well as Web of Science, Scopus, and Google Scholar was conducted. We checked references of included studies.

Results: Papers reviewed (N=36) reflect global interest with patients defining selection competencies; enabling applicants to learn from workplace-based experiences; clinical skills assessment for selection purposes and, enhancing diversity and inclusivity. One-off studies predominate and are mostly descriptions of patient engagement rather than critical examination of how patients can provide the most value. We could not identify a selection framework for advancing patient engagement, nor a fulsome report regarding rationale, benefits, risks, limitations, and impact(s).

Conclusion: Although a cohesive argument for patient engagement in medical trainee selection is lacking, the fact that groups across the globe have engaged patients suggests there being value in doing so. To advance policy and practice in this domain, we need to begin prioritizing patient-relevant outcomes alongside selection outcomes.

OBV 8-6

69329

Patient understanding of ophthalmology resident roles in cataract surgery

Daiana-Roxana Pur Western University, **Tony Lin** Western University, **Yiannis Iordanous** Western University, **Lulu LCD Bursztyn** Western University

Background/Purpose: Medical education assumes a collaborative trainee-patient relationship, yet the role of resident physicians may be unclear to the patient. Without this knowledge, patients may not fully comprehend what they are consenting to when allowing resident participation. We explored patient understanding of the role of ophthalmology residents in cataract surgery.

Methods: Consecutive patients scheduled for cataract surgery were asked the definition of an ophthalmology resident via phone, as part of a larger survey study. Clinical and demographic data were obtained via chart review. Data were qualitatively examined for common themes, whereas differences and relationships in the data were assessed using Fischer's Exact Test.

Results: There were 279 participants (87.4% response rate), and 64.2% answered correctly. The remaining 17.9% thought residents were medical students, 9.7% that they were doctors who have not chosen a speciality yet, and 6.1% were too unsure to choose an answer. Factors associated with the correct answer were being female ($p < 0.028$), knowing someone close that works in healthcare ($p < 0.032$), prior surgery ($p < 0.033$), having a bachelor's degree or more ($p < 0.018$). Common themes concerning patients' worries about resident involvement in their surgical care included: intra-operative and post-operative problems, prior negative experiences with trainees or physicians, reluctance specifically for eye-related procedures.

Conclusion: Patients have a moderate understanding of the role of ophthalmology residents. Explicit discussions about their role should be incorporated as part of informed consent. This is not only ethically necessary but may also increase patient comfort with treatment by trainees.

OC: April 25, 2022; 10:00 MST

OC 1 Black health & wellness / EDI / social accountability

Glen 201 - CTCC

OC 1-1

69467

Virtual Forum on Black Student Representation in the Health Sciences - Moving Forward Together

Rhode Esther Joseph Université de Montréal, **Jean-Michel Leduc** Université de Montréal, **Karina Cristea** Université de Montréal, **Isabelle Ferdinand** Université de Montréal, **Édouard Kouassi** Quebec Black Medical Association, **Yves Alavo** Université de Montréal, **Saleem Razack** McGill, **Ahmed Maherzi** Université de Montréal

Background/Purpose: Black students underrepresentation is well-described in many health sciences programs and actions are urgently required to address this issue. To generate concrete solutions, we organized a virtual forum on Black student representation in the health sciences.

Summary of the Innovation: The two Montreal-based Faculties of medicine partnered with several health sciences programs and two community-based organizations (Quebec Black Medical Association and Black Youth Socio-Economic Development Summit) to organize a public consultation about Black student representation on Zoom. Approximately

100 representatives from universities and community-based organizations attended the event. The day was split in four activities: 1) a focus group where 8 participants shared their experience within the education and healthcare system, 2) a conference to present data on the representation of Black students, 3) A series of breakout rooms discussion ("World Café" method), which were then summarized with a plenary discussion, 4) A wrap-up session where the main themes of the day were presented. Major themes highlighted included: the importance of financial support, recruitment programs and good orientation counselling, more role models, better knowledge and promotion of health professions, the need to review and update admission policies, and the need to foster an inclusive and diverse learning environment.

Conclusion: This multi-institutional consultation on Black student representation in health sciences identified many areas for improvement at different levels (community, universities, society) and the need for additional data on the lived experience of Black students in health sciences programs. Collectively, this event will allow us to create and update specific action plans in partnership with community-based organizations.

OC 1-2

69411

Incorporating social accountability in health professions education: Implications for curriculum development and implementation

Tim Dubé Université de Sherbrooke, **Roger Strasser** Northern Ontario School of Medicine, **Erin Cameron** Northern Ontario School of Medicine, **Saleem Razack** Northern Ontario School of Medicine, **Geneviève Petit** Université de Sherbrooke, **Marie-Claudelle Leblanc** Université de Sherbrooke, **Marina Karan** Université de Sherbrooke

Background/Purpose: Although there is a rapid growth in the scholarship of socially accountable medical education, little is known about how social accountability (SA) has been incorporated into health professions education (HPE).

Methods: We conducted a scoping study to document and map the breadth and depth of the literature regarding educational practices in HPE underpinned by SA. We identified, selected, and summarized relevant literature, in an iterative and critically reflexive fashion. Our search of the relevant databases (CINAHL; ERIC; MEDLINE; APA PsycInfo; Education Source) generated 5,091 results, which were subsequently reviewed for inclusion and exclusion by two independent reviewers. PRISMA Extension was used to illustrate descriptive data and thematic analysis was used to identify descriptive themes. We added a consultation with knowledge users as a final step to ensure that the findings were relevant and accessible.

Results: 134 articles met the criteria for data extraction. 85% of articles were from North America. 80% were published since 2010, with the most in 2019 (13%). 35% were published in medical and nursing journals; these disciplines were discussed in 84% of articles. We identified four major themes in our thematic analysis: conceptualizations of SA; nature and characteristics of educational practices (e.g., service learning, immersive community experiences, simulation, theatre, etc.); learners' development of SA; and barriers and facilitators to implementation.

Conclusion: Our study addresses a critical knowledge-practice gap by synthesizing extant literature into a coherent framework including the elements and characteristics of educational experiences related to SA. Our findings underscore ways in which SA can be incorporated into HPE.

OC 1-3

69418

Social Accountability in Accreditation Processes: How COVID-19 Provided New Insights!

Sophia Myles Northern Ontario School of Medicine, **David Rojas** University of Toronto, **Cynthia Whitehead** University of Toronto, **Erin Cameron** Northern Ontario School of Medicine

Background/Purpose: A crucial feature of accreditation is its emphasis on uniformity and comparability of institutions. COVID-19 required modifications to the accreditation format for undergraduate medical education program visits scheduled in 2020 (Northern Ontario School of Medicine and University of Toronto). These modifications included replacing the traditional one stage in-person site visit with a virtual two-stage site visit. In light of this change, researchers at NOSM and UofT, two contextually different schools with different approaches to distributed education and social accountability collaborated with accreditors to conduct a multiple case study to evaluate the impact and processes of the virtual two-stage site visit.

Methods: Using a purposive and convenience recruitment approach, forty-six semi-structured interviews were conducted with individuals involved in accreditation at each school, visiting-team members, and members of the CACMS secretariat. Qualitative thematic analysis was used to analyze the data.

Results: The findings centered around three main themes. First, connectivity within context including among team members, within the schools, and resulting dynamics. Second, the extent to which the virtual format provided accreditors with a 'sense of place' balancing standardization and contextualization. Third, social accountability as an educational philosophy and the ability to which it is and can be represented in accreditation structures and processes.

Conclusion: The modified format can promote future changes to strengthen social accountability standards as well as linkages between context and impact measures to account for structures and processes at each site. Further modifications to the accreditation process can ultimately make Canadian medical education truly socially responsive.

OC 1-4

69555

Fostering Socially Accountable Health Research using an Adaptive Action Method (AAM) in a Faculty Development Program

Wendy Graham Memorial – University of Newfoundland, **Cheri Bethune** Memorial – University of Newfoundland, **Shabnam Asghari** Memorial – University of Newfoundland, **Jonathan Price** Memorial – University of Newfoundland

Background/Purpose: Community physicians find themselves in an optimal position to conduct socially accountable, locally-relevant health research but often lack the required skills, competencies, and resources. As a result, research skills development programs are crucial to help ensure communities receive the quality of care they deserve. Building capacity for locally-relevant health research, however, is a wicked (complex) problem that requires equally complex strategies.

Summary of the Innovation: A team at the Discipline of Family Medicine, Memorial University developed and have been delivering a longitudinal faculty development program, called 6for6, and have utilized the Adaptive Action Method (AAM) as a strategy to conquer the wickedness of health research skills development. The basis of the AAM is asking three questions: What? So what? And now what? Through this approach, the team identified that the long-term goal of the program (project completion and encouraging sustained rural research) had not yet been achieved and provided a template for the team to determine their next steps.

Conclusion: Utilizing AAM as a strategy for the 6for6 Program assisted the team in clarifying the problem while also encouraging creative approaches to address it. AAM allowed the team to stop seeking the one correct answer and, instead, embrace complexity science and a systems approach to foster sustainable research engagement and rural research capacity building.

OC 1-5

69676

Fostering reconciliation through health education, bringing the campus to the community

David Taylor Queen's University, **Lynne Innes** Weeneebayko Area Health Authority, **Elaine Innes** Weeneebayko Area Health Authority, **Sandra Kioke** Weeneebayko Area Health Authority, **Leslie Flynn** Queen's University, **Denise Stockley** Queen's University, **Jane Philpott** Queen's University

Background/Purpose: The health outcome disparities for Indigenous peoples in Canada are linked to the denial of Indigenous rights. They are rooted in the laws, policies, and practices of our country - including residential schools, forced mass resettlement, and intentional cultural oppression. The paucity of Indigenous graduates from traditional health professions training programs in Canada directly contributes to these disparities. There is a need for transformation in health professions training that can only be achieved through strong partnership with Indigenous communities and health authorities.

Summary of the Innovation: The Weenneebayko Area Health Authority and Queen's University's Faculty of Health Sciences have a strong, 56-year partnership in healthcare. Recognizing the transformative change needed, we set a course to re-invent health professions training. We aim to co-create (1) a Pathways program to mentor and recruit Indigenous youth into postsecondary health professions training and (2) develop an innovative health campus in the James Bay region delivering decolonized and Indigenized programs. This campus will include training in nursing, medicine, physiotherapy, occupational therapy, midwifery and paramedicine. It will be led locally, be fundamentally interprofessional, integrate Traditional Healing, and reflect Indigenous ways of learning and knowing.

Conclusion: Our partnership establishes a model for reconciliation and transformation in healthcare. Our proposal re-thinks health professions training; it reaches back to K-12 education, situates health training programs within Indigenous community, and builds curricula responsive to the health needs of the communities served. Through this we will grow opportunities for Indigenous youth, build clinical capacity within Indigenous communities, and deliver on culturally competent healthcare for Indigenous peoples.

OC 1-6

69708

Using a mixed-methods approach to provide and validate a portrait of the evolution of a school's social accountability mandate

Charles-Antoine Millette Université de Sherbrooke, **Annabelle Cumyn** Université de Sherbrooke, **Catherine Larouche** Université du Québec à Chicoutimi, **Sharon Hatcher** Université de Sherbrooke, **Michel Landry** Université de Sherbrooke, **Timothy Dubé** Université de Sherbrooke, **Ève-Reine Gagné** Université de Sherbrooke

Background/Purpose: Medical schools are grappling with the actualization of their Social Accountability (SA) mandate, and are called

upon to align education, research, and service delivery with the priority health needs of the populations they serve. The Faculty of Medicine and Health Sciences (FMSS) at the Université de Sherbrooke has implemented actions rooted in a desire to be socially accountable. However, since the concept of SA remains ill-defined, our purpose with this study was to document the evolution of SA at the FMSS and its medical program in recent years.

Methods: Using a mixed-methods approach, we completed a document analysis based on five strategic plans (2005-2023) and evaluative feedback following two accreditation visits. These were analyzed according to Boelen's Conceptualization/Production/Usability model via qualitative and quantitative content analyses. The resulting portrait and timeline of the evolution of SA was validated through individual and group interviews with key informant experts from the three training sites of the medical program (Sherbrooke, Saguenay, and Moncton).

Results: The study highlighted the increasingly explicit emergence of SA in strategic planning. Actions were implemented in terms of partnerships, admissions, and reform of the medical program. More challenging areas were identifying population needs, integrating community voices in decisional processes, and evaluating impacts.

Conclusion: Beyond the production of strategic actions, a faculty must also foresee the dimension of usability for its SA mandate. Applying a conceptual framework for SA to analyze its evolution at a medical school leads to a more explicit understanding of its strengths and areas for continuous quality improvement.

OC 2: CBME

Glen 202 - CTCC

OC 2-1

69172

Exploring the relationship between social accountability and competency-based medical education: A narrative review.

Angela Schneider University of Calgary, **Anindita Bhattacharya** University of Calgary, **Tejeswin Sharma** University of Calgary, **Allison Brown** University of Calgary

Background/Purpose: Social accountability (SA) has been recognized as a quintessential function of medical education whereby programs have a responsibility to train physicians capable of meeting societal needs. SA has been loosely discussed as one precipitant for the transition toward competency-based medical education (CBME); however, the relationship between SA and CBME remains unclear. A narrative review was conducted to systematically explore how the relationship between SA and CBME has been described in the medical literature.

Methods: Electronic databases were systematically searched using a predefined search strategy and a manual search of select journals and medical education organizations was performed. 335 titles and abstracts were screened and 139 full texts were reviewed. Salient text was extracted from 35 records, which was then inductively coded before interpretation.

Results: The relationship between SA and CBME was described in one of three ways: 1) CBME as a driver of SA where CBME was described as inherently socially accountable, 2) CBME as a tool to achieve SA where CBME can be used as a means to become socially accountable, and 3) CBME as a means to measure SA relating to measurable outcomes data provided by CBME.

Conclusion: CBME has a theoretical ability to assist programs in their aim of becoming more socially accountable if the communities they serve are involved in program design and implementation. Further, CBME has the potential to demonstrate SA based on having measurable outcomes.

However, there remains a paucity of evidence demonstrating SA within programs which have implemented CBME.

OC 2-2

69224

Who's the Leader: Challenges of Entrusting Simulated Pediatric Resuscitation

Gaby Yang University of British Columbia, **Rose Hatala** University of British Columbia, **Andrea Gingerich** University of Northern British Columbia

Background/Purpose: Ad hoc entrustment reflects complex decision making that is only beginning to be understood. To better understand this decision process there is growing need to examine the context within which entrustment decisions are made. One clinical context that has not been explored is pediatric resuscitation. These high-stakes, team-based, tasks offer a novel opportunity for study. Our aim was to explore how supervisors determined whether to entrust residents with resuscitation leadership during simulated pediatric resuscitations.

Methods: A phenomenology approach guided our study of the supervisor's experience of entrusting resuscitation leadership to residents during bi-monthly multidisciplinary in-situ simulated resuscitations. We observed six resuscitations and interviewed 5 supervisors.

Results: The supervisors who entrusted the resident sought to foster resident autonomy as they valued learning by doing. The supervisors who did not entrust residents saw simulated resuscitations as proxies for real-life practice where the emphasis was to provide patient care. These supervisors performed as they would in real-life, prioritizing patient outcome, expedient leadership, and meeting team expectations. None felt it would be appropriate to entrust residents in real-life, regardless of resident ability.

Conclusion: Supervisors who viewed in situ simulations as learning opportunities entrusted residents with leadership and those who viewed it as practice for the team did not. Their assessment of the resident's competence in leading the resuscitation was less influential than expected. This warrants further inquiry into using entrustment-supervision ratings from simulated resuscitations for assessment purposes.

OC 2-3

69613

Residents as Supervisors: A Cognitive Lens on How Senior Residents Make Entrustment Decision

Kayla Nelson University of Calgary, **Sarah McQuillan** University of Calgary, **Andrea Gingerich** University of British Columbia, **Glenn Regehr** University of British Columbia

Background/Purpose: As residency programs transition to competency-based medical education, there has been substantial inquiry into understanding how ad hoc entrustment decisions are made by faculty preceptors. However, senior residents are often the ones directly supervising junior residents in the moment. This dynamic has been overlooked in the entrustment literature, which is troublesome, as senior residents are increasingly being encouraged to document their entrustment decisions of junior residents as part of the record used by competency committees.

Methods: Eleven semi-structured interviews with senior obstetrical and surgical residents explored how senior residents think about their entrustment decisions of junior residents. Using grounded theory methodology, data were analyzed in an iterative manner, whereby the

information obtained in interviews helped inform the structure of subsequent interview questions.

Results: Residents described several unique considerations for limiting junior colleague participation in difficult cases. For example, when a case might become particularly complicated seniors limited junior resident participation due to concerns about their ability to rescue the junior resident. They also described "taking over" cases with anticipated poor outcomes to protect their junior colleagues from blame for that poor outcome (by the junior themselves and by others). Finally, they described taking on extra clinical load themselves to reduce mental stress and burnout in junior residents.

Conclusion: Throughout training, senior and junior residents work closely together. The near-peer nature of this relationship affected senior resident's decisions about junior residents' clinical participation in ways that had more to do with concern for their junior colleague's well-being than with entrustment.

OC 2-4

69506

Variables associated with unsuccessful EPA performance during clerkship

Janeve Desy University of Calgary, **Adrian Harvey** University of Calgary, **Kevin Busche** University of Calgary, **Christopher Naugler** University of Calgary, **Kevin McLaughlin** University of Calgary, **Mike Paget** University of Calgary

Background/Purpose: In 2016 the AFMC published their list of 12 Entrustable Professional Activities (EPAs) for the transition from medical school to residency. The objective of this study was to identify variables associated with unsuccessful EPA ratings during clinical clerkship.

Methods: Participants were students from one centre who graduated in 2021. We performed multilevel mixed logistic regression analysis (outcome variable: EPA rating (successful or unsuccessful), fixed effects explanatory variables: time during clerkship, setting, and the specific EPA).

Results: Students attempted a mean of 75.04 EPAs (range of 2.15 for EPA 10 - 12.97 for EPA 1). The mean number of attempted EPAs on clinical rotations ranged from 0.55 (Anesthesiology) to 12.34 (Internal Medicine). 96.27% of attempted EPAs were successful. Six variables were independently associated with EPA performance. Of these, five were associated with increased odds of EPA performance being unsatisfactory [completion during the first 100 days of clerkship (odds ratio (OR) 1.90 [95% confidence interval 1.35, 2.68], $p < 0.001$) or on Anesthesiology (OR 8.14 [4.04, 16.42], $p < 0.001$); the clerkship OSCE (OR 6.86 [5.10, 9.24], $p < 0.001$), EPA 5, (OR 1.47 [1.08, 1.98], $p = 0.012$) or EPA 10 (OR 1.74 [1.12, 2.70], $p = 0.014$).

Conclusion: Our findings suggest that the odds of unsuccessful performance of EPAs is higher during the earlier period of clerkship training, varies between clerkship rotations and EPAs, and is higher on the clerkship OSCE. Further studies aimed at confirming and explaining these findings are underway.

OC 2-5

69662

Lost in Translation or Lost in Transition: Clinician teacher perceptions of CanMEDS roles in CBME

Teresa Chan McMaster University, **Andrew LoGiudice** McMaster University, **Matthew Sibbald** McMaster University, **Sandra Monteiro** McMaster University, **Jonathan Sherbino** McMaster University, **Amy Keuhl** McMaster University, **Geoffrey Norman** McMaster University

Background/Purpose: Within competency-based medical education (CBME), the dominant assessment components are entrustable professional activities (EPAs), which contain milestone tasks tied to CanMEDS roles. With increased focus on EPAs, some educators have worried that the CanMEDS roles may potentially be lost to teachers and trainees since they are buried within EPAs.

Methods: We conducted a survey of three groups of clinical teachers (adult cardiology, emergency medicine, and anesthesia) to measure how consistently EPAs were classified with regards to the CanMEDS roles. Participants received a random selection of their specialty's EPAs and then were asked to determine if that EPA contained any intrinsic CanMEDS roles. Their perceptions were analyzed in two ways: 1) compared to the official Royal College documents; and 2) interrater agreement (intraclass correlation coefficient, ICC) between each specialty. We used an Analysis of Variance (ANOVA) to examine interactions between specialty and additional educator roles on the level of agreement.

Results: Thirty-eight clinician teachers participated in our study. Clinician teachers' responses matched to formal EPA documents about 60% of time across the three specialties. The ICCs were small and ranged between 0.10-0.30, suggesting poor interrater reliability. The ANOVA showed there was no main effect of specialty (F=0.91, p=0.41) but there was a main effect of having an official education role within the program (F=12.6, p<0.001).

Conclusion: CanMEDS roles risk being lost in translation as we transition into CBME. Faculty and trainee development may be needed to maintain awareness of CanMEDS.

OC 2-6

69677

Co-constructors of meaning? On how residents and academic advisors (co-)regulate learning over time

Ryan Brydges University of Toronto, **Leora Branfield Day** University of Toronto, **Deborah Butler** University of British Columbia , **Rupal Shah** University of Toronto, **Ayelet Kuper** University of Toronto, **Walter Tavares** University of Toronto, **Shiphra Ginsburg** University of Toronto, **Lynfa Stroud** University of Toronto

Background/Purpose: While Competence by Design (CBD) guidelines explicitly propose the Academic Advisor (AA) role, each residency program must decide whether and how to implement this new role. Such advice likely generates uncertainty and heterogeneity in how AAs are identified, trained, and how they function to "monitor and advise" residents. We sought to clarify how AA-resident dyads experienced their meetings as opportunities to influence residents' approaches to learning.

Methods: Closely following each of their six meetings during two years of Internal Medicine residency, we conducted separate debriefs (~20-minutes) with individual AAs and residents from nine dyads (N=18, 108 debriefs). Transcripts were analyzed using a theory-informed, abductive framework analysis with self-regulated learning sensitizing concepts.

Results: We analyzed 46 resident and 39 AA debriefs (85/108) and produced a rich description of how AAs and residents engaged in self- and co-regulated learning. Participants developed their own expectations for

the AA role, which did not always align. The 'stances' they adopted served to guide their perceptions and govern their activities with each other, and in the CBD system more broadly. We observed unique patterns in how stances shifted or evolved, in how this impacted the co-construction of meaning and strategies, and in the factors influencing the dyad over the two-years.

Conclusion: We observed important variation in how AAs and residents come together to deliberately and intentionally self- and co-regulate each resident's learning progress. In studying how this dyadic relationship forms and functions over time, our findings have implications for how to better prepare AAs and residents for learning-focused interactions.

OC 3: Indigeneity

Glen 203 - CTCC

OC 3-1

69427

[Leading change from within: student-led reforms to advance anti-racism within medical education](#)

Tyler Warnock University of Calgary, **Tharsini Sivananthajothy** University of Calgary, **Whitney Ereyi-Osas** University of Calgary, **Pamela Roach** University of Calgary

Background/Purpose: Institutional and medical violence against Black, Indigenous, and racialized people (BIPOC) within Canada has been the subject of many institutional and national position statements and calls for action. While many undergraduate medical education programs have recognized their role in dismantling racism within medical education, few have actualized anti-racism reforms. Opportunities are needed for medical students to deepen their understandings of anti-racism and self-reflexivity, and apply these learnings to their environment to facilitate and operationalize anti-racist medical practice.

Summary of the Innovation: This student-organized initiative at the University of Calgary sought to introduce anti-racism interventions to address gaps within medical curricula and advance anti-racist praxis at the student level. Interventions consisted of a class-wide anti-racism training session, and a strategic review of the Calgary Medical Students' Association's current constitution, elections, and decision-making policies through an anti-racist lens to advance equity within student learning environments. Woven throughout this process was a commitment to community, which was actualized through: paid consultations with BIPOC medical students and faculty to identify feedback and concerns; partnerships with an Afro-Indigenous facilitator for the training and strategic review; and advocacy efforts for changes to medical curricula to include mandatory teaching on anti-racism.

Conclusion: Anti-racism reforms require both knowledge and action. Through both training and organizational review, our initiative showcases the important role of students in disrupting the status quo and modeling the integration of anti-racist lens in their actions and self-governance.

OC 3-2

68849

[Advancing Indigenous medical education and leadership in health care: Creation of the National Consortium for Indigenous Medical Education](#)

Marcia Anderson University of Manitoba, **Danielle N. Soucy** National Consortium for Indigenous Medical Education

Background/Purpose: The National Consortium for Indigenous Medical Education is an important step towards addressing anti-Indigenous racism in medical education and health care. Training physicians who can practice medicine in ways that meet the needs of Indigenous Peoples requires Indigenous leadership, learning environments that are free of racism, and assessment processes that ensure physicians have anti-racism and cultural safety knowledge and skills. This will require widespread structural reform to implement Indigenous-led solutions in health care education and service delivery.

Summary of the Innovation: NCIME and its collaborating partners (IPAC, RCPSC, AFMC, MCC, CFPC) established six priority working groups 1. Assessment of Indigenous studies, cultural safety, and anti-racism. 2. Anti-racism. 3. Increasing admissions/transitions of Indigenous students across entry points during medical education and developing accountable admissions processes. 4. Indigenous faculty recruitment and retention. 5. Improving cultural safety in curriculum and 6. Indigenous physician wellness and joy in work. This session will speak to three learning objectives.1. How to create a consortium based on collaboration among and between Indigenous and non-Indigenous partners and key stakeholders. 2. What does Indigenous leadership in medical education look like and how it can be accomplished. 3. The challenges and success of creating tools to fit a national agenda within First Nations, Inuit and Metis distinctions-based approaches.

Conclusion: Accomplishments by the consortium and its working groups will be shared along with lessons learned, the importance of the Elder and Knowledge Keepers Circle in our work; and how can NCIME serve as an example of national collaboration between organizations and networks.

OC 3-3

69308

[Decolonizing Methodologies in Qualitative Research: Creating Spaces for Transformative Praxis](#)

Elizabeth Anne Kinsella McGill, **Vivetha Thambinathan** Western University

Background/Purpose: For those who have been oppressed by colonization, research is a dirty word. This pursuit has allowed for predatory, exploitative behavior toward Indigenous communities (Sinclair, 2003). Though there is no standard model or practice for what decolonizing research methodology looks like, there are ongoing scholarly conversations about theoretical foundations, principal components, and practical applications. However, as qualitative researchers, we think it is important to provide tangible ways to incorporate decolonial learning into our research methodology and overall practice.

Summary of the Innovation: Decolonization is not a methodical checklist nor a defined endpoint; it is a life-long process that actively works to dismantle and re-create within & outside of the academy (Zavala, 2013). In this paper, we draw on theories of decolonization and exemplars from the literature to propose four practices that can be used by qualitative researchers: (1) exercising critical reflexivity, (2) reciprocity and respect for self- determination, (3) embracing 'Other(ed)' ways of knowing, and (4) embodying a transformative praxis.

Conclusion: It is vital for qualitative researchers, particularly those working with populations oppressed by colonial legacies, to critically examine and apply decolonizing methodological practices to their research. At this moment of our historical trajectory, it is a moral imperative to embrace decolonizing approaches when working with colonized groups on what some have described as "stolen land." As Angela Davis has famously said, "In a racist society, it is not enough to be non-racist, we must be anti-racist."

OC 3-4

69323

'This is Not a Friday Afternoon Lecture': Non-Indigenous Medical Educators Perspectives on Advancing Reconciliation

Sarah Burm Dalhousie University, **Kori LaDonna** University of Ottawa, **Chris Watling** Western University, **Libby Dean** Dalhousie University, **Lisa Bishop** Dalhousie University, **Lloy Wylie** Western University, **Danielle Alcock** Southwest Ontario Aboriginal Health Access Centre

Background/Purpose: Medical schools are laying the groundwork for full and meaningful implementation of the Truth and Reconciliation Commission (TRC) Calls to Action. Unquestionably, Indigenous peoples should be leading this work; however, reconciliation is a collective responsibility and as treaty partners, non-Indigenous peoples have a key role to play. Our work aims to better understand the pathways taken by some non-Indigenous faculty in advancing the TRC's Calls to Action.

Methods: Data collection and analysis were informed by narrative inquiry, a methodology that relies on storytelling to uncover nuance and prompt reflection. Participants included non-Indigenous faculty (n=7) affiliated with a Canadian medical school and actively engaged in the TRC's Calls to Action. Interviews elicited participants' perspectives on how reconciliation is perceived, and the types of actions, both institutional and individual, required for genuine progress.

Results: Participants' conceptions of reconciliation emphasized the need for transformative change at the structural, curricular, and attitudinal levels. Participants respected the "nothing about us, without us" ethos, using terms such as "builder of relationships" and "advocate" to define their engagement. Participants described that this often meant choosing the "unpopular" route and noted that lasting change "takes energy and courage" and requires significantly more commitment than "a Friday afternoon lecture".

Conclusion: Reconciliation is a responsibility we all share. Our findings can inform actionable steps towards reconciliation and aid medical schools in better positioning themselves and supporting others to engage in this important work.

OC 3-5

69599

Stories and Visual Time Capsules: Decolonizing knowledge translation of health education research

Inbar Av-Shalom University of British Columbia, **Miles Schaffrick** University of British Columbia, **Cheryl Aman** University of British Columbia, **Yael Mayer** University of British Columbia, **Hannah Doyle** University of British Columbia, **Teah Bryce** University of British Columbia, **Laen Hershler** University of British Columbia, **Ashley Lessard** University of British Columbia, **Vinci Lai** University of British Columbia, **Alicia Ditty** University of British Columbia, **Katie Bunting** University of British Columbia, **Tal Jarus** University of British Columbia

Background/Purpose: Decolonizing knowledge translation (KT)--disseminating knowledge in ways that are accessible to a lay audience and in line with Indigenous knowledge practices--is integral to ethically collaborating with Indigenous communities and increasing their access to and participation in knowledge building. This project aimed to identify and implement decolonized KT of academic, qualitative research findings to members in health professional education programs (HPEPs) and partnered Indigenous communities.

Summary of the Innovation: Upon presenting the analyzed transcript data from an intervention aimed at educating faculty, staff, and students about topics in decolonizing and Indigenizing HPEPs, our Indigenous Elders and Knowledge Keepers advisory (KKEA) expressed the need to

present results to health sciences professionals and the public in a way that humanizes participants' learnings and contributions and includes cultural takeaways. In response, we developed Composite Character Stories (CCS) and a Visual Time Capsule (VTC), which build on Indigenous knowledge dissemination practices. CCS are syntheses of compiled participant quotes representing themes identified in previously-analyzed transcript data and presented as stories of fictional characters. The VTC is an animated digital portrait integrating key themes, results, and Indigenous Elder and Knowledge Keeper input which emerged throughout the process of the Sharing Circles. This was created through two live discussions with the core team and the KKEA providing necessary information and details to the visual scriber.

Conclusion: Together, these innovations contribute to our understanding of culturally-relevant methods for future KT and research dissemination projects. This can help build stronger research partnerships with Indigenous communities and improve access to health sciences education resources.

OC 3-6

69698

Circles of Learning: Decolonizing and Indigenizing Health Professional Education Programs (HPEPs)

Hannah Doyle University of British Columbia, **Yael Mayer** University of British Columbia, **Cheryl Aman** University of British Columbia, **Hali McLennan** University of British Columbia, **Madeline Elder** University of British Columbia , **Inbar Av-Shalom** University of British Columbia , **Miles Schaffrick** University of British Columbia, **Ashley Quinn** University of Toronto, **Elder Doris Fox** University of British Columbia, **Tal Jarus** University of British Columbia

Background/Purpose: Indigenous Peoples have been historically marginalized from and remain under-represented in healthcare professions. Increasing representation of Indigenous students, faculty, and staff in HPEPs requires that learning environments be culturally accessible, relevant, and safer for Indigenous Peoples. This study aimed to implement and evaluate a program designed to promote the understanding of the barriers and facilitators of the inclusion of Indigenous students, faculty, and staff in HPEPs.

Methods: Five cohort-based, multi-disciplinary Sharing Circles were conducted once a month, exploring topics related to decolonizing and Indigenizing HPEPs, focusing on implementation strategies for change. An Elder Advisory contributed to and guided the Circles. The impact of the Circles was evaluated using pre- and post-surveys and focus groups.

Results: Our main takeaways were the importance of Elder and Knowledge Keeper presence in the Circles, the benefit of having cross-department conversations on decolonizing and Indigenizing strategies, and the need for greater commitment from faculty, staff, and students to push for further changes in their HPEPs. Participants reflected on the context of change-making, and themes emerged: 1. The need for a long-term commitment to create change, 2. Initiating actions for change, 3. Lack of external structures, resources and processes, and 4. Tensions on cohesion and commitment within programs

Conclusion: These results will provide the basis for creating further programming and cross-department collaboration in HPEPs to decolonize and Indigenize the practices and procedures currently in place in the programs focusing on building safer and inclusive spaces for Indigenous Peoples in the health profession.

OC 4: CME / CPC

Glen 204 - CTCC

OC 4-1

67767

Barriers to cross-disciplinary knowledge flow: The case of medical education research

Mathieu Albert University of Toronto, **Paula Rowland** University of Toronto, **Farah Friesen** Women's College Hospital, **Suzanne Laberge** Université de Montréal

Background/Purpose: The medical education research field operates at the crossroads of two distinct academic worlds: higher education and medicine. As such, this field provides a unique opportunity to explore new forms of cross-disciplinary knowledge exchange.

Methods: We performed a bibliometric analysis of the reference lists of publications from medical education and higher education journals. We identified five medical education and five higher education journals with the highest impact factor in 2017. We randomly selected 10% of all articles, which totalled 105 articles (64 medical education; 41 higher education). These articles cited a total of 1959 articles: 1412 in the 64 medical education sampled articles, 547 in the 41 higher education sampled articles.

Results: With 80% of the references coming from within medical education or clinical and health services research journals, medical education researchers appear to be relatively inwardly focused and selective about the sources of knowledge they allow entry into their academic space. They have a strong connection with academics from the applied health sciences domain, from whom they garner most of their external knowledge. This external body of knowledge is mostly complemented by work internally produced by medical education scholars. Only 20% of the citation comes from other domains (e.g., education, higher education, sociology).

Conclusion: Interdisciplinarity for medical education researchers primarily means being inspired by, and drawing on, clinical and health services research. Education, higher education, and other disciplines have limited access to the medical education field. Medical education researchers mostly inhabit a space somewhat removed from the debates occurring across the disciplines.

OC 4-2

69320

A Unique Journal Club in a Longitudinal Instructional Development Program

Umberin Najeeb University of Toronto, **Danny Panisko** University of Toronto

Background/Purpose: Most academic Journal Clubs (JC) focus on critiques of methodology, critical analysis of results, and review the quality and applicability of new knowledge obtained in journal articles. The Master Teacher Program (MTP), a 2-year longitudinal instructional development program for busy clinician-teachers at the Department of Medicine, University of Toronto, runs a JC with very different objectives. Our JC allows participants to: 1) gain exposure to salient medical teaching and education journals, 2) expand teaching content knowledge on a variety of topics, 3) review articles through collegial group discussion, and 4) apply new understanding to enrich personal teaching practice.

Summary of the Innovation: Each MTP participant is required to present one 30 minute JC session during the Year-2 of the program. They choose an article that is relevant to their teaching or educational needs. All participants read the article beforehand and engage in group discussion.

While the format is very flexible, presenters are encouraged to offer a 5-minute summary of the article and then lead a group discussion to: 1) discuss the relevance, 2) emphasize the impact of the published information on teaching or education practice, and 3) delineate issues raised in the article with which they are in agreement or disagreement. Content, teaching practice, and application of the JC article are also highlighted by participants. 68 MTP participants have presented JC from 2017-2021.

Conclusion: This JC format expands academic reading, enhances knowledge and application of the literature on medical teaching/education practice, and encourages discussion among busy clinician-teachers in an instructional faculty development program.

OC 4-3

69559

Learner engagement in CPD: Medical record keeping course for physician remediation

Chloe Burnett University of Calgary, **Heather Armson** University of Calgary, **Niamh Lyons** University of Calgary, **Nigel Flook** College of Physicians and Surgeons of Alberta

Background/Purpose: Learner engagement is critical to teaching/learning experience and educational outcomes. The rapidly changing landscape in continuing professional development has called for innovative design of physician remediation courses to facilitate intensive learning and actual improvement in targeted competence areas.

Summary of the Innovation: Partnership with College of Physicians and Surgeons of Alberta, University of Calgary CME&PD Office offers a medical record keeping course to physicians with identified gaps in clinical documentation. The course activities are in the order of pre-course survey, submission of sample clinical notes and referral letter, case exercise, modules on principles and strategies with reflective questions, pre-workshop survey, 3-hour workshop, 3-month post-workshop re-submission, one-hour webinar. For each round of ~10 participants, their online responses are exported into individual 'learning profiles' to inform the workshop teaching. Participants evaluate anonymized sample works during the workshop. They are asked to describe 'one thing planned to do in the next week' at the end of the workshop. They discuss with peers what strategies worked during the webinar. Faculty review and provide feedback on participants' sample submissions and re-submissions. Participants show changing attitudes along with the steps of the course. Improvement in participants' clinical documentation is observed in the re-submissions and later in the College's practice review re-measurement.

Conclusion: The dynamic nature of blended learning leads to quality learning experiences in this CPD course. With continuous facilitation and support from faculty and course team, learner engagement and transformative learning outcomes are possible in physician remedial education.

OC 4-4

69570

An analysis of asking and answering questions in Continuing Professional Development Activities

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

Background/Purpose: Asking and answering questions (AAQ) is an essential component of learning and supports meaningful participation in continuing professional development (CPD) activities. AAQ skills are seen

to be inherent for CPD attendees. Scholarly studies of the theoretical grounding of AAQ in Bloom's Taxonomy, questioning style and depth of enquiry are limited in CPD. This study aimed to characterize AAQ and consider pathways to optimize AAQ by both faculty and participants in CPD activities.

Methods: Audits were conducted of the style and depth of AAQs for in-person and virtual CPD events. Bloom's Taxonomy and thematic analysis was to characterize the audit results. Comparison of the audit results was conducted. Implications for optimizing AAQ and possible training were drawn from this.

Results: 220 questions were audited. 130 were closed-ended direct questions, 52 were open-ended questions, 38 were comments with no question. Questioners asked 1 to 4 questions (average 2.2). The questions addressed 1 to 3 issues (average 1.8), including clarification of the study conduct (55), rationale for conclusions (40), clinical implications (70), future directions (65), comparison to other studies (35) and miscellaneous (35). The nature of answers included direct (50), discussion (95), indirect (40), none (35). Options to optimize AAQ included curricular, direct interventions, coaching, role-modeling, program enablers and peer-to-peer learning.

Conclusion: This audit shows a spectrum of skills necessary for AAQ with a variety of questioning strategies and types of answers. Training may increase the ability of participants and faculty to improve AAQ in CPD activities to enhance participant understanding and improve clinical practice.

OC 4-5

69597

An evaluation survey template for CPD programs

Tanya MacLeod Dalhousie University, **Michael Allen** Dalhousie University, **Stephen Miller** Dalhousie University, **Michael Fleming** Dalhousie University, **Mary Ann Robinson** Dalhousie University

Background/Purpose: Evaluation surveys are a useful and convenient way to gather feedback on individual educational programs, however comparisons over time and between programs require that CPD providers agree on survey items. The development of a survey template for CPD programs requires careful consideration of educational outcomes, accreditation and program reporting requirements, and resources for data analysis and reporting.

Summary of the Innovation: We conducted a content analysis of survey items to identify evaluation domains across our accredited CPD programs. Using a Delphi approach, a team of program managers, directors and an evaluation specialist identified items for a survey template to address information needs across all programs. We identified 123 unique survey items from 11 accredited programs. Items were organized into 13 domains: demographics, presenter skills, organization, applicability to practice, interaction/discussion, learning/knowledge, evidence-based, objectives/learning needs, intention to change, bias, future topic suggestions, suggestions for improvement, and general/overall evaluation.

Conclusion: We developed a survey template for use across all CPD programs. This presentation will encourage participants to consider ways to optimize their use of surveys in program evaluation. We will also discuss future opportunities and limitations of surveys in program evaluation. The survey template will be available.

OC 4-6

69658

Educational Innovation Groups Initiative: A proposal to build a MedEd community

Mildred Lopez Tecnologico de Monterrey, Escuela de Medicina y Ciencias de la Salud, **Arturo Santos** Tecnologico de Monterrey, Escuela de Medicina y Ciencias de la Salud, **Jorge E Valdez-García** Tecnologico de Monterrey, Escuela de Medicina y Ciencias de la Salud

Background/Purpose: Medical education has grown as an exciting interdisciplinary field where professionals are highly motivated to implement innovation projects and develop research. However, most of the efforts are short-term projects that are individual-driven. As a result, there is little understanding of the complex underlying phenomena by not stating a broader vision, and the projects' impact is limited.

Summary of the Innovation: The objective of the Educational Innovation Groups Initiative was to build a MedEd community with defined strategic lines that guide research and innovation. The community has undergraduate students, residents, and faculty members that engage in educational projects to improve the quality of education in the School of Medicine and Health Sciences. Although scientific production was one of the designed metrics, others included students' involvement in research, the attraction of funding, and participation in associations. Four groups were established: the smaller had six members and the largest twenty.

Conclusion: In 2018, the historic scientific production of the school consisted of 20 papers and 68 citations. Six of the papers were on Scopus indexed journals. In 2019, after only one year of implementation, participants published 17 papers and received 108 citations. Eight papers were on Scopus indexed journals. In 2020, the groups published 27 papers, and their work gathered 212 citations. Thirteen papers were on Scopus indexed journals. Fostering this community has changed the focus from individual-driven implementations to a learning community where projects grow in impact and quality. The next step is to mature into a more collaborative and international MedEd community.

OCV 5: Black health & wellness / UGME Curriculum

Virtual 1

OCV 5-1

69626

Integrating Anti-Black Racism in to the Anti-Oppression Equity Diversity Inclusivity Undergraduate Medical Education (UGME) Curriculum: Conducting a Targeted Needs Assessment

Simran Sandhu Queen's University, **Andrea Winthrop** Queen's University, **Ishita Aggarwal** Queen's University, **Mala Joneja** Queen's University, **Michelle Gibson** Queen's University

Background/Purpose: Anti-Black racism is a key component of an integrated Anti-Oppression, Equity, Diversity, and Inclusivity (Anti-O EDI) curriculum. A targeted needs assessment was designed to evaluate the effectiveness and impact of Anti-O EDI curricular changes to facilitate further integration of Anti-Black racism Anti-O curricular enhancements.

Summary of the Innovation: The needs assessment includes:1) Community consultation interviewing anti-racism- and equity-informed stakeholders. 2) Generating a list of anti-racism Anti-O EDI related keywords, tagged relevant curricular objectives and professional standards, used to facilitate analysis of curricular content. 3) Development of 3 surveys (students, faculty, and staff) to collect participant perspectives on Anti-Black racism Anti-O curricular content and identify opportunities for improvement.

Conclusion: Over 50 internal and external stakeholders were identified and provided recommendations, which, in addition to a literature review, facilitated creation of surveys for participant groups (medical students, School of Medicine faculty, and UGME staff). Surveys include questions on the perceived quality of Anti-Black racism curricular content and delivery, accessibility, and racism/Anti-O/EDI in hiring, training and performance reviews. Curricular data collected from the learning management system will identify current integration of Anti-Black racism Anti-O/EDI in to the UGME curricular objectives. This needs assessment will guide continued Anti-Black Racism/Anti-O/EDI integration in to the UGME curriculum. The aim of the curriculum is to equip students with the skills they need to foster more equitable, safe, learning and clinical environments for Black peers, colleagues and patients

OCV 5-2

69287

[Improving Racial Diversity of Skin Presentations in Medical Curriculum - A Student-Led Initiative](#)

Eric Zhang Queen's University, **Ikunna Nwosu** Queen's University, **Aquila Akingbade** Queen's University, **Michelle Gibson** Queen's University

Background/Purpose: Queen's Medicine aims to prepare medical students to practice nationally and internationally, to care for diverse populations. However, students identified a lack of diversity in visual representations of skin tones throughout their pre-clerkship curriculum with respect to cutaneous presentations.

Methods: A student-led group of 120 student volunteers reviewed all 909 learning events in the pre-clerkship curriculum to itemize which events included skin presentations, and which had equitable representation of skin colour. When cutaneous presentations were included, images of white skin tones as well as darker skin ranges were noted.

Results: 169 learning events included skin presentations, and 158 had images of white skin only. This issue affected numerous units: Cardiology, Endocrinology, Dermatology, and others.

Conclusion: Prior to this process, there was a significant lack of racial diversity in skin images in the pre-clerkship. Students are often first to notice the gaps in their learning. This initiative highlights the importance of student-led equity work and the need to incorporate insights from students who identify as BIPOC (Black, Indigenous, and People of Colour) in efforts to improve medical education. While this review was supported by the Curriculum committee, it is recommended that institutions must find ways to support BIPOC students through academic opportunities and appropriate funding to continue improving inclusivity in medical education. The second phase of the project includes students assisting faculty in finding racially diverse images and finding sustainable measures to address the inequity within lecture materials.

OCV 5-3

69170

[A Collaborative to Increase Financial Literacy across Different Medical School Curricula](#)

Stephanie Zhou University of Toronto, **Pascale Gendreau** McGill, **Jane Healey** University of Toronto, **Laila Premji** University of Toronto, **Sonia Rahimi** McGill, **Nathalie Saad** McGill, **Thuy-Nga (Tia) Pham** University of Toronto

Background/Purpose: Under the CANMEDS Leader competencies, physicians "effectively manage practice and career, and utilize strategies to balance their professional and personal lives." With the median educational debt of medical students in 2020 reaching $100,000, 15.7% of students are graduating with over $200,000 in loans. A lack of financial education leaves students susceptible to predatory financial advice and inadequate future savings. It negatively impacts academic performance and mental health, particularly for students of higher debt burdens or lower socioeconomic class. In a study of 521 physicians, only 18% received financial planning training in medical school despite financial counselling and education being standards for accreditation. Here we discuss and contrast the Financial Literacy Curriculum across four Canadian medical schools, particularly McGill University and University of Toronto.

Summary of the Innovation: Surveying 457 students across Dalhousie, McGill and University of Toronto (UofT), we conducted a needs-based assessment of student financial knowledge and interests. In alignment with a curriculum mapped at the University of Ottawa, interactive lecture materials were developed and shared across all institutions with each institution adapting the aligned objectives to fit the needs of their students. McGill's WELL Office and UofT developed four financial wellness sessions across a 4-year curriculum. Sessions were given by conflict of interest-free physicians with advanced financial knowledge. Evaluations were completed post-lecture.

Conclusion: Students rated the Financial Literacy lectures highly and Youtube lecture recordings have been watched thousands of times. The lessons learned can influence the creation of similar curricula elsewhere, ensuring that graduating students make informed decisions around their financial future.

OCV 5-4

69587

[Everything Old is New Again: Reimagining Geriatrics Education in Clerkship](#)

Michelle Hart University of Toronto, **Jillian Alston** University of Toronto, **Thirumagal Yogaparan** University of Toronto, **David Rojas Gualdron** University of Toronto, **Stacey Bernstein** University of Toronto

Background/Purpose: Less than half of Canadian medical schools have a mandatory geriatrics rotation. A geriatric curriculum review of Temerty's clerkship experience found critical gaps. We prioritized bridging these gaps through an innovative, 3-phased approach, including geriatric e-modules, a patient panel, and a geriatric core rotation.

Summary of the Innovation: In 2020, eight geriatric e-modules and one seminar were embedded in core clerkship rotations of Family Medicine, Internal Medicine, and Psychiatry. Program evaluation data from the pilot guided iterative curricular changes. In 2021, four more e-modules were added to the Surgery and Emergency Medicine rotations, as well as a seminar on advance care planning in the Transition to Clerkship course. Content was determined based on gaps identified from the curriculum review; such as balance and gait disorders, urinary incontinence, medication optimization, transitions of care, cognitive impairment and community-based care. Students were assessed on the content in their end of rotation assessments. A small longitudinal patient panel that included one mandatory older adult patient was implemented in third year clerkship in 2021. The aim of this experiential learning was to develop skills in advocacy, empathy, communication, and collaboration in caring for older adults in a holistic manner. Phase 3, a two week mandatory geriatrics rotation taking place in the second half of year four, is planned for the 2023 academic year.

Conclusion: Our presentation will summarize the effective implementation and successful early outcomes of curriculum evaluation of the e-modules and patient panel, and demonstrate how gaps in geriatric education are successfully addressed through a multimodal curriculum.

OCV 5-5

69138

[Bending but not breaking: learning flexibility in scheduling clerkship rotations during a global pandemic](#)

Andrea Guerin Queen's University, **Amber Hastings-Truelove** Queen's University

Background/Purpose: Clinical clerkship scheduling is complex, influenced by the Medical Act, the regulating bodies, individual school requirements and clinical resources. The pandemic presented a novel challenge to this already complex system. A variety of different educational strategies needed to be implemented to meet the requirements for students to graduate.

Summary of the Innovation: Educational strategies fell in to two main categories: 1. Fairness and transparency: Student schedules were structured differently depending on the impact of the pandemic on their rotations. However, the same number of clinical weeks in the same core clerkship disciplines were expected from all students. Make up time was built into the schedule to create flexibility around illness, quarantine and decreased clinical volumes. Blocks were shortened to allow for all core material before electives and to allow students autonomy over their schedules, and examinations were made more flexible. 2. Managing student volume and safety: Initially there were not enough clinical opportunities to restart clerkship; therefore, a redesign of the current blocks added inter-professional experiences, asynchronous learning, disciplines with less visibility in the curriculum, and the expansion and creation of integrated sites for learning.

Conclusion: Innovation in education is a team sport. The changes that were necessary for the three Clerkship classes that were impacted by the pandemic represent the support of faculty all over Ontario, community partners and the students. The impact of these innovations will continue to manifest in future iterations of clerkship as they have proven to be improvements over the previous curriculum.

OCV 5-6

69053

[Do Canadian Medical Students Believe in Choosing Wisely?](#)

Bright Huo Dalhousie University, **Yousef Bolous** Dalhousie University, **Diane Ramsay** Dalhousie University, **Emma McDermott** Dalhousie University, **Samuel Campbell** Dalhousie University, **Tammy Selman** Dalhousie University

Background/Purpose: Physician application of resource stewardship (RS) is inconsistent. To initiate change, medical students must value RS as good practice habits develop early in training. However, students are impacted by the hidden curriculum. This study investigated medical student perceptions toward the Choosing Wisely Canada (CWC) Campaign.

Methods: A bilingual questionnaire was distributed to all Canadian medical students. The primary objective was to identify whether students believe that CWC is an important initiative. Students indicated whether CWC is sufficiently represented in curriculum, whether the workplace culture in medicine supports the application of RS, and identified barriers to student advocacy for CWC.

Results: The survey was completed by 3,239 (27.6%) Canadian medical students, who endorsed that the CWC Campaign is an important initiative (12.4/15.0 ± 1.98). However, few students felt that their institution sufficiently integrated CWC into the pre-clerkship (47.0%) and clerkship (24.6%) curriculum. Only 61.4% felt that it is reasonable to expect physicians to apply CWC recommendations given the workplace culture in medicine. Only 35.1% students were comfortable addressing resource misuse with their preceptor. The most common barriers to addressing misuse with preceptors included the assumption that their preceptor was more knowledgeable (86.4%), concern over evaluations (66.1%), and concern about reputations (31.2%).

Conclusion: Canadian medical students support that the CWC Campaign is an important initiative. However, many felt that that the workplace culture in medicine does not support the application of CWC recommendations. A power imbalance prevents students from advocating for RS in practice, which must be addressed.

OCV 6: Technology & education

Virtual 2

OCV 6-1

69236

[On Being Human: An ethnography of cadaver-based simulation](#)

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

Background/Purpose: Cadavers have long played a crucial role in anatomy education. Thanks to recent innovations in body preservation, however, cadavers now serve a crucial role as simulators involved in procedural skills teaching. Through our ethnographic work, we noted that there is a notable difference in how learners interact with cadavers versus manikins. This presentation asks, "What role does a cadaver's humanness play in procedural skills simulations?"

Methods: We conducted a two-year practice-based ethnography (Structured Observations n = 110 hours, Unstructured Observations n = 150+ hours; Interviews n = 24; and Document/Policy Analysis n = 14). During this time, we attended cadaver-based simulation sessions, memorial services, and toured human body donation facilities, and interviewed teachers, learners, living donors and family members of donors, and human body donation staff.

Results: The humanness of cadavers permeates simulations in subtle, but remarkable, ways, which we classified as follows: 1) Delivering care (holding a cadaver's hand); 2) Respectful Practice (taking care to keep a cadaver's eyes covered), and 3) Responding to Traces of Life (expressing concern about a cadaver's frailness). Empathy and compassion, critical in health care, surface in cadaver-based simulations in powerful ways.

Conclusion: Despite our best efforts, humanness cannot be simulated. Rather than detaching us from it, confronting death in medical simulations reminds us of our common humanity. We encourage educational developers of any cadaver-based program-whether in the dissecting room, the skills lab, or any other context-to build pauses into the curriculum, creating the space to deliberately consider, and honour, the innate humanness of cadavers.

OCV 6-2

69253

[Innovation of Novel Immersive Clinical Experience (ICE) to Enhance Medical Education Curriculum](#)

Rem Aziz University of British Columbia, **Alasdair Nazerali-Maitland** University of British Columbia, **Kevin Shi** University of British Columbia

Background/Purpose: COVID-19 has incurred unprecedented MedEd challenges through interruption of clinical rotations nation-wide, forcing educators to explore other mediums to deliver clinical experiences. The University of British Columbia Faculty of Medicine has developed a novel immersive patient experience using virtual reality to enhance the clinical

skills program and evaluate student perception regarding its formal integration into curricula.

Summary of the Innovation: An immersive clinical experience (ICE) of a patient encounter in a virtual emergency setting was designed in collaboration with Faculty, MedIT EdTech and the Vancouver Film School AR/VR program. The experience emphasizes core clerkship competencies including history-taking, physical examination, generating differential diagnoses, and implementing investigation and management plans. Sessions were integrated into the medical undergraduate curriculum and delivered to second-year students in preparation for clerkship. An instructional video was developed to orient learners to virtual reality (VR), equipment used and cleaning protocol. Sessions (30 minutes) were followed by an optional 10-item feedback survey.

Conclusion: Students reported huge positive feedback to the experience with interest for more immersive learning opportunities in curriculum. As demonstrated in our project, augmentation of medical education with VR technology has not only allowed medical students to continue clinical experiences under restrictions of the COVID-19 pandemic, but also created a truly standardized patient encounter thereby enabling all students a fair and equitable learning opportunity. Given its positive reception and efficacy in challenging students to strengthen clinical acumen, we hope to expand our initiative to integrate further clinical applications and inspire curriculum leads across the country to follow suit in enhancing medical education.

OCV 6-3

69706

[Use of Point of View Live Streaming Technology for Community-Engaged Learning in a Long-Term Care Facility](#)

Bernice Ho University of Toronto, **Lauren Wintraub** University of Toronto, **Roxanne Wright** University of Toronto, **Fok Han Leung** University of Toronto, **Michelle Hart** University of Toronto

Background/Purpose: The COVID-19 pandemic has been the catalyst for medical schools to convert curricular activities to online platforms. This transition has been particularly difficult for teaching community-engaged learning. The literature on how to teach community-engaged learning virtually is also limited. This quality improvement study examined the novel use of point of view (POV), live streaming technology for community-engaged learning amongst pre-clerkship students in the Temerty Faculty of Medicine at the University of Toronto.

Summary of the Innovation: The entire first year class attended a virtual tour of a long-term care (LTC) facility through Zoom® that was captured on an iPad affixed to a mount on wheels. The tour was facilitated by a physician and involved six interviews with interprofessional healthcare providers and a resident. Optional session evaluations administered through the Medical School Information System (MedSIS) were used to assess student perceptions. The course evaluation data showed that although this platform cannot fully substitute in-person learning, it did provide pedagogical benefits to students. Students' average likert scales for statements on the innovation's pedagogical value ranged from between 3.46 and 4.31. Furthermore, excerpts from students' comments highlighted how the sessions were engaging. Comments also highlighted some of the regular issues encountered with online teaching.

Conclusion: Although this innovation is not intended to replace in-person community-engaged learning, we have provided a cost and pedagogically effective solution for teaching this course distantly. Our study acts as a framework for other healthcare professional programs interested in using POV modalities to teach essential in-person curricula via distance-learning.

OCV 6-4

69641

[TikTok - an emerging platform on vaccine information](#)

Katherine van Kampen McMaster University, **Jeremi Laski** Central Michigan University College of Medicine, **Gabrielle Herman** McMaster University, **Teresa Chan** McMaster University

Background/Purpose: The novel coronavirus-19 (COVID-19) pandemic has highlighted the need for reliable information, especially, around vaccines. Vaccine hesitancy is a growing concern in North America and is one of the greatest threats to public health, according to the World Health Organization. TikTok is an emerging social media platform that young adults may be for health information.

Methods: We reviewed the 123 most viewed TikToks with the hashtag of #covidvaccine. Primary inclusion criteria were any TikToks in English with discussion of a covid vaccine. Each TikTok was reviewed and coded by two independent reviewers, discrepancies were resolved with a third reviewer. Descriptive features were recorded including health care professional (HCP) status of creator, verification of health care provider status, genre and myths addressed.

Results: Of the 103 videos included, the median number of plays was 1.7 million, with median shares of 9224 and followers 62200. Upon analysis, 10.6% of TikToks included HCPs (n=11), 81% (n=9) could be verified via social media or a google search. 100% of HCPs supported vaccine use, and overall 81% of all videos supported vaccine use.

Conclusion: As the pandemic continues, vaccine hesitancy poses a threat to lifting restrictions and discovering reasons for this hesitancy is important to public health measures. This study presents an opportunity to examine the discourse around the vaccine use on TikTok, and the role of healthcare providers in this medium.

OCV 6-5

69692

[Psychiatrists of the World Unite: A Novel Partnership in Medical Education between Canada and Pakistan](#)

Feodor Poukhovski-Sheremetyev University of Ottawa, **Nicholas Laird** University of Ottawa, **Syed Hassan Gillani** King Edward Medical University, **Sardar Khizar Hayat** King Edward Medical University, **Ibrahim Mohammad** University of Ottawa, **Eileen Kim** University of Ottawa, **Haseeba Javed** King Edward Medical University, **Amna Rashid** King Edward Medical University, **Sumiya Lodhi** University of Ottawa, **Preet Gujral** University of Ottawa, **Aqeeb Ur Rehman** King Edward Medical University, **Irum Aamer** King Edward Medical University, **Nazish Imran** King Edward Medical University, **Khalid Bazaid** University of Ottawa

Background/Purpose: A globalized world requires a globalized approach to mental healthcare, and yet this is rarely reflected in undergraduate psychiatric curriculums. Despite increasing dialogue about a global shortage of mental health practitioners, there have been few concrete efforts to produce widely-accessible educational content about psychiatry that is aimed at a diverse, international audience. Improving psychiatric recruitment demands a careful consideration of this gap in global medical education.

Summary of the Innovation: In order to address this issue, the World Psychiatric Association (WPA) has spearheaded an innovative new medical education initiative that is bringing together medical students and psychiatrists from around the world to collaborate on freely accessible interactive learning modules on various mental health topics. In a novel partnership between the University of Ottawa and Pakistan's King Edward University, students used their unique contextual understandings to produce educational content on psychiatry, student wellness, and cross-

cultural presentations of mental health stigma. This presentation will cover the insights, as well as challenges, that such a collaboration can bring, as well as provide a brief roadmap for others to follow if they also hope to pursue global collaborations in medical education.

Conclusion: The need for an internationally collaborative approach to psychiatric curriculum design is particularly important in the Canadian context, where a multicultural society has historically encountered a rigidly Western mental healthcare system. Given the renewed focus in DSM-5 on cultural concepts of distress and cross-cultural variations in psychopathologic presentation, it is more critical than ever to draw on culturally diverse sources when educating the next generation of psychiatrists.

OCV 6-6

69717

[Incorporation of virtual physiology and pathophysiology laboratories into the pre-clerkship curriculum](#)

Reeham Kadhom University of Ottawa, **Michel Désilets** University of Ottawa, **Claudia Meloche** University of Ottawa, **John Leddy** University of Ottawa

Background/Purpose: Teaching of physiology and pathophysiology to pre-clerkship students at uOttawa consists of formal lectures, without hands-on laboratories. Simulation programs, if properly designed, should reproduce experiential and critical learning associated with laboratory activities. The project aimed to first develop experimental scenarios closely related to the cardiovascular and respiratory systems taught to first-year medical students, using the simulation program QCP, a freeware developed by the University of Mississippi Medical Center. Lab manuals and tutor guides were then constructed in accordance with the deliberate practice conceptual framework. To validate the pedagogic value of the approach, we asked second-year medical students (n=27), residents (n=6), and medical educators (n=6) to thoroughly evaluate one of the lab activities (on heart failure), either by performing the proposed experimental protocols (students) or by assessing the activity after watching a 30-minute explanatory video. Results from the three groups indicated the high pedagogical potential of this activity, with a consensus that it: is motivating (71% agree or strongly agree), focuses on well-defined learning objectives (95%), is at the appropriate difficulty level (82%), allows for repetition of the skill (92%), and is followed by immediate feedback (95%). Furthermore, 89% of the participants recommended that the lab activities be incorporated into the Pre-clerkship curriculum.

Summary of the Innovation: The project consisted of having a formal evaluation of the pedagogic value of a novel approach that makes use of virtual laboratories for the teaching of physiology and pathophysiology to pre-clerkship medical students.

Conclusion: The majority of participants recommended that the lab activities be incorporated into the Pre-clerkship curriculum.

OCV 7: Feedback

Virtual 3

OCV 7-1

69446

[Value depends on the eye of the beholder: How residents receive and judge feedback from supervisors during procedure-related EPAs in an Internal Medicine program](#)

Natasha Sheikh University of Toronto, **Joshua Mehta** University of Toronto, **Rupal Shah** University of Toronto, **Ryan Brydges** University of Toronto

Background/Purpose: Implementing Entrustable Professional Activities (EPAs) has unveiled a tension between the Royal College's intentions and on-the-ground physicians' and trainees' workflows and educational beliefs. We investigated whether the quality of EPAs of procedural skills differed when completed by senior trainees versus by faculty. We also explored residents' perspectives of the quality, value, and utility of written EPA feedback.

Methods: We assessed the quality of 45 de-identified procedural EPAs using a modified Completed Clinical Evaluation Report Rating (CCERR) tool. Participants (15 PGY-1 and PGY-2 internal medicine residents) sorted 15 EPAs into self-identified categories, and then completed a semi-structured interview. Interviews explored participants' perceptions of written feedback and feedback providers. We used constant comparative analysis to distill the interview data into a conceptual understanding of how participants receive and act on EPA feedback.

Results: We found no difference in modified-CCERR scores for EPAs completed by senior trainees versus faculty. Residents described a process of weighted deliberation when reading their EPA feedback. Specifically, they weighed their perceived credibility of the assessor, their perceived quality of the feedback narrative, and their own self-judgment; all toward judging the value and utility of the feedback. Feedback that aligned with residents' own self-assessment filter was felt to be more valuable.

Conclusion: Our findings align with previous studies demonstrating a complex interplay between residents' perceptions of assessor credibility, of feedback quality, and their own self-assessment 'filters'. That interplay, in turn, ultimately influences how residents judge the value and utility of feedback. We explore implications for addressing these inherent tensions of EPAs.

OCV 7-2

69171

[A Call to Action: Why do Medical Residents Act on Verbal Feedback?](#)

Aaron Jattan University of Manitoba, **Cate Kennedy** University of Dundee

Background/Purpose: Whilst verbal feedback is the most common form used in the training of medical residents and has been established as effective in improving clinical performance, there is little understanding of why a learner chooses to act on feedback. This narrative inquiry study sought to validate principles believed to be integral to feedback utilization by having medical residents narrate their experiences of acting on the verbal feedback provided to them in the clinical setting.

Methods: This study included senior medical residents in four different specialties. Nine residents participated in one hour semi-structured interviews. A thematic analysis was conducted to validate previously theorized principles and to uncover emerging factors important for feedback action. A secondary structural narrative analysis was conducted to help develop typologies that revealed the emotional and cognitive processes impacting feedback action.

Results: The thematic analysis helped validate principles theorized to be critical in feedback use, such as specificity and direct observation. Additionally, it was shown that feedback grounded in a learner's clinical context improved utilization of feedback. The typologies uncovered in the narrative analysis revealed the impact of emotion and cognition on feedback use. Feedback's impact on one's self-efficacy or self-concept would alter how a learner would process the feedback provided, with self-threatening feedback resulting in emotional and cognitive barriers to

feedback use. Conversely, self-preserving feedback attenuated the emotion of feedback encounters.

Conclusion: This study has added to our understanding of the complex phenomena of feedback and is the first to validate the factors which contribute to feedback utilization by medical residents.

OCV 7-3

69212

[Développement et mise à l'essai du Guide de rétroaction francophone pour l'observation directe des résidents en médecine familiale au Canada](#)

Miriam Lacasse Université Laval, **Jean-Sébastien Renaud** Université Laval, **Luc Côté** Université Laval, **Alexandre Lafleur** Université Laval, **Marie-Pierre Codsi** Université de Montréal, **Marion Dove** McGill, **Luce Pélissier-Simard** Université de Sherbrooke, **Lyne Pitre** University of Ottawa, **Christian Rheault** Université Laval

Background/Purpose: Il n'existe aucun outil par jalons reposant sur les CanMEDS-MF pour guider la rétroaction en supervision par observation directe (SPOD). Nous avons développé un guide pour soutenir la documentation de la rétroaction en SPOD en médecine familiale (MF) au Canada.

Summary of the Innovation: Méthode: La conception du Guide a été effectuée en trois phases avec la collaboration de cinq programmes de MF canadiens ayant minimalement un site d'enseignement francophone : 1) recension des écrits et étude des besoins; 2) élaboration du Guide de rétroaction SPOD; 3) mise à l'essai du Guide en contexte de simulation vidéo avec analyse de contenu qualitative. Résultats: La phase 1 a démontré le besoin d'un guide narratif ayant pour but 1) de préciser les attentes mutuelles selon le niveau de formation du résident et le contexte clinique, 2) d'outiller et structurer le superviseur dans ses observations 3) de faciliter la documentation de la rétroaction. La phase 2 a permis d'élaborer le Guide, en formats papier et électronique, répondant aux besoins identifiés. En phase 3, 15 superviseurs ont utilisé le guide pour trois niveaux de résidence. Le Guide a été ajusté à la suite de cette mise à l'essai pour rappeler les phases de la rencontre clinique souvent oubliées durant la rétroaction (avant la consultation, diagnostic et suivi), et y suggérer des types de formulation à favoriser (questions stimulantes, questions de clarification, réflexions).

Conclusion: Issu de données probantes et d'une démarche de concertation, ce Guide outillera les superviseurs et résidents francophones canadiens dans leurs activités de SPOD en médecine familiale.

OCV 7-4

69307

[Asynchronous Delivery of Feedback in Residency: Exploring Near Peer Residents' Perspectives](#)

Alyssa Lip University of Toronto, **Christopher Watling** Western University, **Shiphra Ginsburg** University of Toronto

Background/Purpose: Background: Current orthodoxy relating to feedback embeds two assumptions: feedback should be "timely", and feedback should be delivered face-to-face. Yet we lack sufficient understanding of optimal timeliness, and of the potential affordances of different modalities that may allow for asynchronous delivery. Purpose: In subspecialty residents, who have a dual role in both providing and receiving feedback, we explore perspectives on the key assumptions that feedback should be "timely" and face-to-face.

Methods: Methods: Using constructivist grounded theory we conducted semi-structured interviews with sixteen subspecialty residents across

multiple programs. Interviews were analyzed iteratively using constant comparison to identify themes, until theoretic sufficiency was determined.

Results: Results: Residents felt there was a place for feedback that is delayed, exhibiting a keen awareness of the receiver's state of mind, weighing several factors perceived to affect receiver readiness and willingness for feedback. Time for reflection to consider the underlying goal of feedback and the existing relationship, affected how feedback was framed, delivered, interpreted, and processed. Written feedback afforded the ability to formulate thoughts and construct feedback that considered language, succinctness, and intended takeaways. However, it was felt to be more formal and easily conflated with assessment, limiting its current role.

Conclusion: Conclusions: In this near-peer population, we highlight tensions that critically influence the formulation and delivery of high-quality, effective feedback. The way in which feedback is delivered needs to reflect these considerations and requires sufficient time for synthesis by providers. Residents identified multiple contexts in which written and/or delayed feedback may be preferable, challenging the current orthodoxy standard.

OCV 7-5

69694

[Designing a Centralized Faculty Performance Dashboard: Optimizing Feedback and Scholarly Data Reporting](#)

Vanessa Munford McMaster University, **Yusuf Yilmaz** McMaster University, **Neil Barr** McMaster University, **Cynthia Lokker** McMaster University, **Mark Crowther** McMaster University, **Shera Hosseini** McMaster University, **Teresa Chan** McMaster University

Background/Purpose: Health Sciences faculty members, including medical educators, participate in a diversity of scholarly activities across teaching, research, administration, and clinical service. Performance feedback and data on these contributions provide valuable formative assessments for faculty development and serve summative purposes such as promotion and merit payments. However, faculty performance data are not adequately captured or reported at most Universities. To explore this gap, this project designed prototypes for an online performance analytics dashboard for Health Sciences faculty members.

Methods: This was a design-based research study that used multiple methods to gather design requirements. Findings were triangulated from a literature review, stakeholder interviews and document analysis. Focus groups and interviews were conducted for faculty to evaluate the prototypes. Multiple iterations of evaluation and revisions were conducted to refine the dashboard design. A constructivist grounded theory approach was utilized to analyze qualitative data from the focus groups and interviews.

Results: Findings from the various requirements gathering methods were summarized and used to inform the dashboard design. Prototypes were shown to a diverse participant pool of 18 Health Sciences faculty members. The analysis of transcripts from focus groups and interviews revealed 4 main themes which highlighted several important requirements, considerations, and challenges for the construction of the dashboard.

Conclusion: By designing dashboard prototypes, this study generated valuable insights about the needs of faculty members who would use this tool. The findings from this study can help inform the work of other Universities or departments who are building a similar solution.

OCV 7-6

69205

NL360+: A Multisource Feedback & Peer-Coaching Pilot Program

Lisa Fleet Memorial – University of Newfoundland, **Vernon Curran** Memorial – University of Newfoundland, **Cindy Whitton** Memorial – University of Newfoundland

Background/Purpose: Medical education and regulatory bodies are increasingly promoting the development and implementation of physician self-assessment and self-learning strategies. In response, the Office of Professional & Educational Development (OPED), Faculty of Medicine, Memorial University piloted and evaluated NL360+, a multisource feedback and peer-coaching experience.

Summary of the Innovation: The program consisted of: (1) completion of the Medical Council of Canada (MCC) 360; (2) two peer-coaching sessions; and (3) development and implementation of a personal learning/action plan. A mixed-methods evaluation design guided data collection, including a pre/post-program assessment, evaluation survey, and interviews/follow-up survey. This was supplemented by a rapid review of the peer-reviewed literature and environmental scan. Thirty-four (N=34) participants and N=13 MD peer-coaches volunteered to participate. All N=34 participants (100%) completed the MCC 360; n=22 participants completed two coaching sessions, while n=8 participants completed one coaching session.

Conclusion: NL360+ participants reported significant improvement in their readiness for self-directed learning, as well as overall satisfaction with NL360+, specifically the MCC 360 process and the peer-coaching experience. The majority reported that participation in the program influenced them to make changes in their respective practices. Peer-coaches reported that the initial coaching training provided them with the necessary knowledge and resources for the program, but could also be useful when teaching postgraduate trainees and medical students. The evaluation of NL360+ demonstrates the potential value of this program to the province's physician population, providing them with an opportunity for reflection and reflective practice via a 360-degree evaluation and coaching experience.

OCV 8: Assessment

Virtual 4

OCV 8-1

68957

Video-based assessment (VBA) of an open, simulated orthopedic surgical procedure: Can data about performance and competence be extracted from a single camera view?

Obaid Al-Hubaishi Dalhousie University, **Andrew Glennie** Dalhousie University

Background/Purpose: Video-based assessment has been validated in arthroscopy, but it is lacking evidence in open orthopedic procedures. It could allow portable and de-identified methods for objective assessments of competence. Our goal was to assess the validity of video evaluation of orthopedic surgery residents performing simulated open cadaveric procedure. We secondarily sought to explore faculty impressions of the strengths and limitations of video-based assessment.

Summary of the Innovation: Methods: Four residents performed simulated open reduction and internal fixation of both bone forearm fracture and underwent live assessment using Ottawa Surgical Competency Operating Room Evaluation (O-SCORE). Their evaluations were videotaped and re-evaluated by five orthopedic surgeons using the same evaluation tool. Intra-rater and inter-rater reliability were calculated. Qualitatively, thematic analysis on semi-structured interviews exploring the strengths and limitations of video-based assessment were conducted. Results: The Interclass Correlation Coefficient for video-based assessment showed good Intra-rater reliability 0.782 (P-value <0.001) and Inter-rater reliability 0.832 (P-Value 0.014). The strengths of video-based assessment according to faculty perception included the ability to re-check missed points during live assessment, more constructive feedback, anonymization and use of multiple assessors. The limitations included the lack of high-fidelity simulated assessment, poor audio-video quality and inability to evaluate readiness for practice.

Conclusion: This is the first study to demonstrate that video-based assessment is a reliable and valid assessment tool in open procedures in orthopedics. Audio-video quality should be improved before making high stakes decisions about readiness for practice.

OCV 8-2

69117

Going virtual ! Creating a simulated oral office practice on Zoom

Tania Riendeau Université de Montréal, **Caroline Béique** Université de Montréal

Background/Purpose: Within the Family Medicine Unit (CUMF) Notre-Dame, the simulated office orals (SOOs) practice for the Certification Examination helps senior residents practice their future exam Junior residents and members of the teaching unit act as observers and patients (actors) respectively. The Covid-19 pandemic stopped this activity in 2020.

Summary of the Innovation: In 2021, three guides were created to prepare for a virtual practice: one for the senior residents, one for the observers, and one for the teachers. All guides reviewed the schedule, everybody's role, the use of Zoom and reactions to technical problems. A Zoom meeting with all the participants days before the practice revised the guides, addressed questions. The virtual Zoom practice involved 8 senior residents, 10 observers, 10 teachers and 3 coordinators and involved 5 SOOs of 15 minutes, each followed by 15 minutes individual feedback , in 11 break-out rooms, including a waiting room. A global session followed for general feedback for the residents. Immediate reactions were positive. A survey showed that senior residents appreciated the activity and feedbacks. Some mentioned the virtual practice was less stressful. The observers and actors appreciated the practice, but some noted difficulty in evaluating empathy in a virtual setting .

Conclusion: This pedagogical innovation implemented at the CUMF Notre-Dame was a success. Following this virtual practice, the Canadian Family Medicine College announced future SOO would be on a virtual format, making this practice even more relevant.

OCV 8-3

69222

Conducting Differential Item Functioning for the Preclinical Sciences Assessments: Does Conditioning on Test vs. MCAT Scores Make a Difference?

Mohammed Abulela University of Minnesota, USA, **Claudio Violato** University of Minnesota, USA, **Esther Dale** University of Minnesota, USA

Background/Purpose: To ensure that test items function equally across groups and consequently fair score interpretations and uses, differential item functioning (DIF) should be conducted. However, a critical decision that should be made, when using nonparametric DIF procedures, is selecting a conditioning variable on which to match examinees. Test scores are typically used, but some use other external standardized test scores (e.g., Medical College Admission Test [MCAT]). The objective of the

present proposal is to investigate whether the number of items possessing DIF, if any, differs when matching examinees on their test vs. MCAT scores.

Methods: Using Anatomy, Histology, and Physiology midterm scores from 520 undergraduate medical students, DIF analysis was conducted based on their sex (males vs. females) and ethnicity (white vs. nonwhite). We utilized Mantel-Haenszel (MH) and Logistic Regression (LR) procedures, since they are widely used in operational settings.

Results: Overall, the number of items flagged as possessing C-level DIF increased when the conditioning variable was examinee test scores for both sex and ethnicity across the preclinical assessments. As for the DIF procedure, more items were flagged based on MH compared to the LR procedure. Utilizing the MH procedure with the test score as a conditioning variable makes more items candidates for further sensitivity reviews, which are associated with additional human and financial resources.

Conclusion: These results have practical implications for conducting fairness analyses for the preclinical sciences assessments. We consequently emphasize that test developers and psychometricians should carefully select the conditioning variable, as it has serious implications for DIF results.

OCV 8-4

69483

[The implementation of case-based learning for assessment of competence in a post-graduate program](#)

Richard Nadj University of Ottawa, **Daniel Dubois** University of Ottawa, **Melody Afagh** University of Ottawa

Background/Purpose: The Department of Anesthesiology and Pain Medicine residency program at the University of Ottawa transitioned to a competency-based medical education curriculum, involving replacing traditional academic half-day didactic lectures with a case-based learning (CBL) model. This CBL model was introduced and incorporated to improve the demonstration of core competencies and to better align with evidence-based adult learning principles, such as situated learning, self-directed learning, and flexible curriculum design promoting learner-centeredness.

Summary of the Innovation: Using a curriculum map, the CBL education leads developed clinically oriented cases based on the entrustable professional activities and knowledge objectives corresponding to the residents' respective stage/rotation. The cases were developed according to the framework for oral examinations with a case stem, questions, and references related to the case objectives. In total, 186 cases were uploaded to an online platform with 5 assigned cases per 4-week rotation (https://learningcases.med.uottawa.ca). Residents were asked to review the assigned case stems and verbally present their responses to faculty leaders for rubric-based assessment.

Conclusion: An anonymous survey was administered to all faculty members (n=103) and CBL residents (n=46) within the Department of Anesthesiology and Pain Medicine. Mean percentile scores from the Anesthesia Knowledge Test (AKT-24) in training exam between historical (n=17) and CBL (n=23) cohorts were compared using a paired t-test analysis. The implementation of the CBL curriculum was well accepted and preferred by both faculty members and residents. The CBL curriculum did not affect performance on the AKT-24. The greatest limitation of the CBL model was allotting sufficient time to review clinical cases with faculty members.

OCV 8-5

69514

[Assessment of teaching practices of healthcare professionals using an online Journal Club.](#)

Julie Grandmaison Université de Montréal, **Esther Bélair-Kyle** Université de Montréal, **Véronique Castonguay** Université de Montréal, **Ahmed Moussa** Université de Montréal, **Frédérique Gauthier** Université de Montréal, **Diane Robert** Université de Montréal

Background/Purpose: To further develop their teaching competencies, faculty seek feedback using different assessment methods. In 2020 we developed a practice assessment tool, accessible remotely and asynchronously online, in the form of a Journal Club.

Summary of the Innovation: The scientific committee initially proposes two papers addressing themes related to health sciences education, which are sent to participants. After reviewing and analyzing the articles, participants complete a quiz, which enables them to develop an improvement plan for their teaching practices. Three months later, participants are invited to critically review the implementation of their improvement plan and to explore the impact of their learning on their teaching practices. Finally, an evaluation survey of the activity is completed. To date, two editions were completed, the first on feedback and the second on teaching procedural skills. Out of the 95 registered participants, 29 completed the educational activity and 24 (83%) responded to the evaluation survey. In the impact questionnaire, participants indicated (with specific examples) that they had adjusted their behavior in teaching situations, notably by consciously choosing to use the educational strategies learned. In the evaluation survey, many mentioned the high quality of the tool, both in terms of the papers chosen, the themes covered, and the format, which makes the learner autonomous in his or her learning.

Conclusion: This educational innovation has shown success, appreciation and impact on faculty development. Going forward, we will need to explore why registered participants do not complete the educational activity. Future editions will cover themes proposed by previous participants in their evaluation survey.

OCV 8-6

69430

[Creation of a database "Studying the path of medical students at the University of Montreal from admission to certification".](#)

Ahmed Moussa Université de Montréal, **Robert Gagnon** Université de Montréal, **Clara Dallaire** Université de Montréal, **Geneviève Gréogoire** Université de Montréal, **Margaret Henri** Université de Montréal, **Marie-Josée Bédard** Université de Montréal

Background/Purpose: In Canada, few studies have been published on the relationship between admission data, in-training outcomes and access to residency for medical students. We present the development of a comprehensive database for innovative research projects.

Methods: Since 2009, all admission data, course results, clerkship evaluations and results of the certification exam part 1 were collected in a database. In 2020, the project received approval from the University of Montreal's Research Ethics Board to obtain consent from enrolled students to use their data for research and publication purposes. The request for permission to use the data collected from previous cohorts will be submitted to the Quebec Commission d'accès à l'information. Students were approached by members of the program committee.

Results: Between April and September 2021, 6 cohorts of students were approached; 2 groups of 4th year students (n=483), 1 group of 3rd year students (n=295), 2 groups of 2nd year students (n=605), 1 group of 1st

year students (n=312) and 1 group of pre-med students (n=180). To date, 676 students have given consent (36%).

Conclusion: It is possible to develop a comprehensive database to generate research projects on the path of medical students during their studies. A significant proportion of students show an interest in allowing the use of their coded results.

OD: April 25, 2022: 15:00 MST

OD 1: Black health & wellness / COVID

Glen 201 - CTCC

OD 1-1

69713

Addressing SARS-CoV-2 Vaccine Hesitancy among Black People in Canada: The "LEAPS of Care" Communication Framework & Afrocentric Health Promotion Approaches in Medical Education

Azza Eissa University of Toronto, **Aisha Lofters** University of Toronto, **Cheryl Prescod** Black Creek Community Health Centre, **Nancy Akor** TAIBU Community Health Centre, **Onye Nnorom** University of Toronto

Background/Purpose: Physicians can significantly influence a patient's decision to vaccinate against SARS-CoV-2 virus. Black people in Canada are at high risk of SARS-CoV-2 infections, hospitalizations, ICU admissions and deaths, yet are more hesitant to receive the vaccine than other Canadians. Vaccine hesitancy in Black communities is not merely due to misinformation; it is also linked to medical distrust and structural racism. Yet, medical education often lacks training on specific strategies for communicating with vaccine hesitant patients from Black communities.

Summary of the Innovation: We created an innovative online module designed to teach clinicians and residents how to address vaccine hesitancy in Black patients; with the goal of increasing their comfort in talking to Black patients and likelihood to continue recommending the SARS-CoV-2 vaccine. The framework was based on ongoing collaboration with community practitioners and health centres that resulted in better understanding of Afrocentric Health Promotion and Prevention approaches, and creation of (1) a 'LEAPS' communication framework, and (2) a video that teaches communication strategies in a role-playing simulation.

Conclusion: We created an educational framework to improve clinicians counselling skills regarding COVID-19 vaccine hesitancy, medical distrust and anti-Black racism in healthcare that is transferable to a CPD model of training. The online module is aligned with the six CANMED roles. As CPD is implemented, use of allied health professionals as resident educators will be needed. This project is the first of its kind in Canadian medical education and has shown that it is feasible to use Black community-engagement to maximize resident education and train collaborative care providers.

OD 1-2

68118

Changing Attitudes Toward Specialty Choice and the CaRMS Residency Match During COVID-19: A Cross-Sectional Pilot Study of Canadian Medical Students

Stuti Misty Tanya Memorial – University of Newfoundland, **Maia Idzikowski** Queen's University, **Bonnie He** University of British Columbia, **Joshua Lakoff** Queen's University, **Sanjay Sharma** Queen's University

Background/Purpose: The Canadian residency match process has been dramatically restructured due to COVID-19. The impact of these changes on specialty choice and access to career-development opportunities

among Canadian medical students remains largely unknown. The objective of this study was to assess whether students' strategy and level of confidence entering the Canadian residency match have changed as a result of the pandemic.

Methods: A 28-item online survey was distributed to all Canadian medical students from the classes of 2021-2024, as well as class of 2020 graduates planning to enter the 2021 CaRMS (Canadian Resident Matching Service) match. The survey was developed based on existing literature and included questions on demographics, access to educational opportunities, and personal strategies for matching. Descriptive statistics, t-tests, and Spearman's correlations were used to analyze the data.

Results: Eleven percent of respondents (n=135) reported a change in specialty preference due to COVID-19. Forty-three percent of respondents reported changing their strategy for the CaRMS match. Respondents interested in a surgical specialty were more likely to report a change in their match strategy (p=0.0150), including applying to more programs (p=0.0012) and exploring other specialities (p=0.0118). Clerks were also more likely to report a change in their matching strategy (p=0.0195) and specialty choice (p=0.0194) compared to pre-clerks.

Conclusion: Our findings suggest that medical students perceived a negative impact from COVID-19 on their ability to access scholarly opportunities and confidence regarding the match, which may have long-term implications in trainee well-being, residency match logistics, and long-term physician resource planning.

OD 1-3

69309

"What kind of a doctor am I going to be in the future?": The COVID-19 pandemic and professional identity formation among Internal Medicine residents

Lorenzo Madrazo Western University, **Grace Zhang** Queen's University, **Kristen Bishop** Western University, **Andrew Appleton** Western University, **Mala Joneja** Queen's University, **Mark Goldszmidt** Western University

Background/Purpose: The COVID-19 pandemic has created unprecedented changes in how residents learn and provide patient care. Gaining insight into how these changes may be influencing professional identity formation can support programs as they seek to adapt training.

Methods: We conducted semi-structured group interviews with 24 Ontario Internal Medicine (IM) residents in PGY 1-3 between November 2020 and July 2021. Participants were asked to reflect upon their experiences of learning and providing care during the pandemic. Constructivist grounded theory guided the iterative data collection and analyses. This process was further sensitized by Argyris and Schon's concepts of espoused theories and theories-in-use.

Results: Participants consistently recognized the importance of collaboration and communication and developed several strategies for supporting patients and families affected by hospital restrictions. There was also a desire to advocate for disadvantaged patients facing barriers to accessing care. However, many felt powerless in their role as residents to enact meaningful change for their patients in the face of systemic constraints. In contrast, some felt empowered to be advocates when supported by their attending physicians.

Conclusion: Residency training during the pandemic appears to have catalyzed the development of patient-centred competencies of communication and collaboration that are, in the literature, frequently identified as lacking in physicians. Concurrently, participants found it challenging to develop their roles as advocates in the face of systemic barriers. Programs should be mindful of these impacts to further support residents' development as advocates. Empowerment from attending

physicians is important in fostering this aspect of their professional identity.

OD 1-4

69341

[Learn while you earn: analysis of medical student roles during the pandemic using experience-based learning](#)

Grainne P Kearney Queen's University, **Katrina Z Freimane** Queen's University, **Jonathan P Callaghan** Queen's University, **Nigel D Hart** Queen's University

Background/Purpose: Undergraduate medical students at Queen's University, Belfast (QUB) were voluntarily appointed to clinical roles in the National Health Service during the COVID-19 pandemic. These paid roles were a unique adjunct to traditional teaching placements. The pedagogy of experience-based learning (ExBL), specifies capabilities that medical students must acquire from clinical experience. This study explored the experiences of these medical students in paid clinical roles.

Methods: Seventeen senior medical students recruited using a convenience sampling strategy participated in three Focus Groups. The dialogue was transcribed verbatim and analyzed using NVivo by the research team which included two medical students who had personal experience in these roles. ExBL was used as a framework to analyze the experiences of the medical students.

Results: The four domains of ExBL (support, participation, real patient learning and capability) were used as a framework to map the findings. Students reported earning whilst they learned beyond financial earning. They described actively developing practical, affective and intellectual capabilities as they supported the work of wider teams to whom they felt accountable. We found that the domains of affective capability and support within ExBL could both be extended to reflect the unexplored concept of (l)earning.

Conclusion: Learning whilst earning afforded medical students a sense of legitimacy whereby they actively contributed to patient care. Whilst initiated in response to the pandemic, we argue the significant benefits for students in continuing this role in the future as a voluntary adjunct to traditional placements, helping prepare them to be doctors in the future by learning through experience.

OD 1-5

69380

[Form and function: How a change in the format of accreditation had functional implications during COVID19](#)

Carrie Cartmill University of Toronto, **Cynthia Whitehead** University of Toronto, **David Rojas** University of Toronto, **Erin Cameron** Northern Ontario School of Medicine

Background/Purpose: In response to COVID-19, the Committee on Accreditation of Canadian Medical Schools (CACMS) implemented a revised accreditation format for MD programs between 2020 and 2021. These revisions included a two-stage virtual meeting schedule, a focused approach for reviewing standards and elements, and the addition of a field secretary to the visiting-team. Our research team conducted a multiple case study to examine the implications of this revised format on stakeholders at two sites: The Northern Ontario School of Medicine, and the University of Toronto.

Methods: Forty-six semi-structured interviews were conducted with individuals involved in accreditation at each site, visiting-team members, and members of the CACMS Secretariat. Interview transcripts were analyzed using qualitative thematic analysis. We applied a sociomateriality lens to analyse ways the revised accreditation format reshaped multiple aspects of the accreditation process.

Results: While the revised accreditation process was intended only to alter the format without otherwise affecting the underlying principles of accreditation, our findings suggested that changes to the format had important consequences within and across sites. First, power was redistributed across stakeholders by reorganizing who was included, excluded, and engaged in the revised accreditation process; Secondly, information and knowledge were circulated and used differently within the accreditation system; Thirdly, new conceptualizations of how context could best be understood were introduced; and lastly, several hidden principles and purposes of accreditation materialized.

Conclusion: These findings highlight that the format of an education process has material effects on processes and outcomes and cannot be considered inconsequential.

OD 1-6

69710

[Service Learning During a Pandemic](#)

Karen Cook University of Manitoba, **Chelsea Jalloh** University of Manitoba, **Barbara Borges** University of Manitoba, **Ian Whetter** University of Manitoba

Background/Purpose: Since 2016, Service Learning (SL) has been a curricular requirement for medical students in the Max Rady College of Medicine. The SL program combines community service with critical reflection. Each academic year, approximately ~220 students are matched with ~33 community organizations to work with over a two-year period. COVID-19, and associated public health orders, had many implications on academic institutions and community organizations. As a result, many universities paused their SL programs. At the University of Manitoba, the SL Team, community organizations, and medical students demonstrated flexibility and initiative to continue SL throughout the pandemic.

Summary of the Innovation: To respond to changes in many community organizations' service delivery, innovative alternatives were required (e.g., a student-led initiative addressed seniors' social isolation through regular phone conversations with medical students). Further adaptations, such as reducing the number of required SL hours, and the development of "flex" SL opportunities for students to work with alternate organizations were also developed. At the end of the year, students provided both positive and constructive feedback; specific considerations included recommendations to streamline communication and consolidate updates in one central location.

Conclusion: Overall, many students shared positive feedback about continuing SL during COVID-19. Medical education programs must strive not only for students to learn about social determinants of health in theory but to put this knowledge into meaningful action (Pinto et al., 2018). The pandemic provided an opportunity for the medical students and the medical college to operationalize principles of social accountability and reciprocal relationship building with community partners during challenging times.

OD 2: Meeting community needs

Glen 202 - CTCC

OD 2-5

69150

[Rewards and Recognition for Distributed Medical Education Preceptors: A Qualitative Analysis](#)

Rebecca Malhi University of Calgary, **Amanda Bell** McMaster University, **Edward Makwarimba** University of Alberta, **Aaron Johnston** University of Calgary

Background/Purpose: Recognition of Distributed Medical Education (DME) preceptors by medical institutions ensures that important community-based training opportunities remain available to learners. Yet the literature seldom explores what is meaningful to this population of teachers. The goal of our mixed-methods cross-Canada study is to provide guidance to medical schools about the financial remuneration and non-financial rewards that are most valued by DME preceptors.

Methods: In the qualitative phase, we invited Phase 1 survey respondents to participate in follow-up semi-structured interviews. Participants with a range of medical specialties, stages of career, and geographic locations were interviewed via Zoom videoconferencing. The sessions in English and French were audio-recorded and transcribed. We used line-by-line inductive coding and thematic analysis to examine participant talk about meaningful preceptor recognition.

Results: Fourteen participants from multiple provinces were interviewed. Results indicated that the DME faculty are a diverse group of people with diverse needs. Most of the interviewees appreciated the rewards and recognition provided by their institutions, but felt that there are areas for improvement. Recognition is not necessarily monetary, and should be tailored to the needs and the values of the recipient. Other themes included: benefits and challenges of being a preceptor, current institutional structures and supports, and the impact of the pandemic on preceptors.

Conclusion: The interviews highlight the importance placed by preceptors on personal rewards and a wide variety of forms of recognition. Based on the findings, we suggest specific steps that medical institutions can take to support, engage, and recognize DME faculty.

OD 2-2

69288

[Enhancing Distributed Medical Education at Memorial University via a virtual provincial tour of Newfoundland and Labrador](#)

Andrew Hunt Memorial – University of Newfoundland, **Sandra Badcock** Memorial – University of Newfoundland

Background/Purpose: Given the population distribution across Newfoundland and Labrador (NL), it is crucial that Distributed Medical Education (DME) is delivered efficiently and effectively to ensure quality health supports for communities. To this end, a team at the Faculty of Medicine, Memorial University (Memorial) conducted an assessment to determine how to enhance the delivery of DME across NL.

Methods: With 27 teaching sites identified across NL, the team utilized virtual meetings with distributed faculty over a two-month span to support their qualitative case study approach. The team recorded all meeting minutes and developed a summary report as well. The team completed a thematic analysis of results to identify any opportunities for enhancing DME.

Results: Participants identified several areas of concern associated with their sites, including many sites wanting to expand and accept more learners, faculty feeling geographically isolated, as well as requests for more continuing medical education and professional development.

Conclusion: Based on the results, Memorial's DME office plans on improving continuing medical education for distributed faculty by providing opportunities for distributed research projects, providing support with scheduling and learning placements, involving distributed faculty in planning and goals, providing brochures for stakeholders about DME, updating a contact list for the main academic centre, and improving distributed faculty's connection with the main academic centre. Implementing these changes will help to enhance DME at Memorial.

OD 2-3

69377

["Uncomfortable Learning:" Perspectives on Integrating Community Engagement in Medical Education](#)

Ghislaine Pilot-Attema Northern Ontario School of Medicine, **Sophia Myles** Northern Ontario School of Medicine, **Mark Thibert** Northern Ontario School of Medicine, **Sadie Barnett** Northern Ontario School of Medicine, **Erin Cameron** Northern Ontario School of Medicine

Background/Purpose: Social accountability (SA) mandates are driving medical schools to integrate community groups and perspectives. In this study we aimed to explore how medical schools are meaningfully undertaking community engagement (CE) within and across medical education programs in Canada.

Methods: Semi-structured key-informant interviews were conducted through purposive and snowball sampling recruitment strategies. Participants included educators and administrators whose interest focused on integrating SA in medical education. A total of ten interviews were audio recorded and transcribed. The data were analyzed using thematic analysis.

Results: Four main themes were identified. First, all participants identified a discomfort in integration, expressing that such integration challenges institutional norms and traditional teaching within medical schools. Second, participants talked about the need to understand the 'system' at all levels, while also identifying longterm and shortterm goals to demonstrate impacts to different stakeholders. Third, the importance of measurable impacts was prominent, both in establishing what impacts are measurable and to whom, with awareness of the pressure to show value and success. Lastly, the sense of isolation in doing this work was a common sentiment, with participants expressing the desire to learn more from and to work with others in these efforts.

Conclusion: These findings have implications for social accountability mandates and contribute to larger conversations within medical education surrounding how medical schools can meaningfully and sustainably engage community perspectives to meet the diverse needs of the communities they serve.

OD 2-4

69383

["Juggle the different hats we wear": Boundaries and dual roles in small communities](#)

Andrea Gingerich University of British Columbia, **Christy Simpson** Dalhousie University, **Robin Roots** University of British Columbia, **Sean Maurice** University of British Columbia

Background/Purpose: Despite consensus that boundaries are foundational to professionalism, we are divided on what constitutes appropriate boundaries and remain uncertain of how to teach boundary setting. The contentiousness of professional boundaries is being

magnified by social accountability successes in increasing practitioners in underserved communities. As folks return to practice in the small interconnected communities they were recruited from, they are expected to maintain boundaries amidst dual roles that defy conventional boundary setting. Since it is unfair to knowingly send our trainees into this paradox unprepared, we examine how such folks set boundaries within dual roles to inform our curricula.

Methods: Following constructivist grounded theory methodology, interviews with 22 physicians who had lived and practised in rural, northern and/or remote communities in BC proceeded in iterative cycles informed by analysis. Recruitment targeted folks who had returned to their hometown or had practised in a given community for decades.

Results: Boundaries tended to be described as personal policies for acceptable practices. In contrast, navigating dual roles was described as "wearing multiple hats" and involved: a) signaling their current role; b) separating roles by redirecting an interaction to the appropriate time and place; c) switching roles in the moment by pushing one forward and pulling one back; and d) suspending a role that is involuntarily pulled forward and resists being pushed back, by ending a relationship.

Conclusion: A reconceptualization of professional boundaries that includes (in)voluntary switching between roles expands our notions of professionalism and offers a new metaphor for teaching boundary setting.

OD 2-1

69423

[Currencies of recognition for Canadian distributed medical education preceptors](#)

Aaron Johnston University of Calgary, **Rebecca Malhi** University of Calgary, **Nicholas Cofie** Queen's University, **Ruzica Jokic** Queen's University, **James Goertzen** Northern Ontario School of Medicine, **Tom Smith-Windsor** University of Saskatchewan, **Edward Makwarimba** University of Alberta, **Sandra Badcock** Memorial – University of Newfoundland, **Sonia Sylvain** Université Laval, **Jean Ouellet** Université Laval, **Jill Konkin** University of Alberta, **Andrew Hunt** Memorial – University of Newfoundland, **Amanda Bell** McMaster University

Background/Purpose: Medical schools spend considerable time, effort, and money on recognition initiatives for rural and distributed medical education (DME) faculty but there is little in the literature to guide these recognition efforts or to predict which items of efforts will be most effective. To better understand how rural and DME faculty value different forms of recognition, we evaluated their perceptions of the importance and meanings they attach to various forms of DME faculty recognition.

Methods: Based on a bilingual survey (n = 222) evaluating rural and DME faculty perceptions of recognition efforts across 9 provinces and a territory in Canada, we used descriptive statistics and exploratory factor analysis (EFA) and examined what DME faculty considered to be i) important and ii) meaningful recognition at their institutions. An orthogonal varimax rotation was used to extract empirically and theoretically relevant factors.

Results: The EFA results revealed that DME faculty recognized all the 13 Likert scale items measuring important recognition as a valid unidimensional construct with high factor loadings ranging from 0.73 to 0.82. This construct was found to be highly internally consistent ($\alpha = 0.95$). The EFA results also revealed a distinct three-factor solution to what respondents considered to be meaningful forms of recognizing DME faculty based on 22 items. These factors were classified as formal instructional recognition ($\alpha = 0.89$), connections, growth and development ($\alpha = 0.88$), tokens and gratitude ($\alpha = 0.82$).

Conclusion: These results could help medical schools make effective choices in efforts to find effective ways to recognize rural and DME faculty.

OD 2-6

69581

[Understanding educational comparability and contextual diversity in distributed education: A scoping review](#)

Helen Hsu University of British Columbia, **Pim Teunissen** Maastricht University, **Kevin Eva** University of British Columbia

Background/Purpose: Distributed medical education (DME) programs face a common tension between taking advantage of the strengths of contextual diversity between campuses and achieving educational comparability across multiple settings, assuring all trainees meet the standards of practice. Insufficient understanding of how this tension is managed creates the risk that programs under-realize DME's potential. Currently, the educational literature isn't clear about what comparability entails. Therefore, a scoping review was conducted to address the question of "how is educational comparability described and operationalized?"

Methods: This study followed the five-stage framework for scoping reviews outlined by Arksey and O'Malley. Two key concepts, comparability and distributed education, guided the generation of search terms. Nine databases were searched and Covidence was used to support screening and study selection between 2 reviewers. 32 article met the inclusion criteria and underwent data extraction.

Results: This review yielded articles that discussed educational comparability across a range of health professions and drawing on disciplines across education, governance, and organizational behaviour. Two main themes emerged: (1) measures used to demonstrate comparability and (2) processes and structures that facilitate comparability.

Conclusion: The findings from this study suggest there is limited variability in how educational comparability is understood for the purposes of meeting accreditation requirements. By establishing comparability through standardizing objectives and measuring academic outcomes, programs strive to claim consistent delivery of training quality while offering diverse exposure across training sites. However, there remains insufficient understanding of how programs manage tensions when comparability is compromised.

OD 3: Relearning CME

Glen 203 - CTCC

OD 3-1

68938

[Psychological Health: An Innovative Online Self-Assessment Program for Medical Specialists](#)

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

Background/Purpose: The current COVID-19 pandemic has accentuated the psychological distress of health professionals. Our organization opted for an unconventional approach to address this serious situation. Given that one is not always aware of their mental health, we rationalized that a Self-Assessment Program (SAP) would enable participants to 1) assess their current level of psychological distress, and 2) identify and implement strategies to improve their resilience. This section 3 accredited course was one of our approaches to improve medical specialists' resilience in these difficult times.

Summary of the Innovation: Our 1-hour online SAP was divided in three parts: 1) a video of an expert who described strategies to maximize one's resilience; 2) a set of validated questionnaires to assess participants' distress level; and 3) a personalized "Resilience Improvement Plan" to be discussed with a significant other or a colleague.

Conclusion: The program was launched in November 2020. More than 500 specialists from all our 35 affiliated medical associations participated in it. We observed an exceptionally high competition rate (87%) for this activity. A high proportion of participants indicated that an online course was perfectly suited to the subject matter (98%), that the choice and combination of methods helped them better understand the concepts (97%), that the activity met their learning objectives (99%), and that they will apply a change to their practice following this activity (91%). Very touching comments were provided by participants upon completion of the activity, reinforcing the validity of our approach.

OD 3-2

69588

Active learning in large group education conferences: comparison of in-person and virtual settings

Anne Mahalik Dalhousie University, **Tanya MacLeod** Dalhousie University, **Dori Rainey** University of Manitoba, **Christine Polimeni** University of Manitoba, **Sarah Burm** Dalhousie University

Background/Purpose: Active learning strategies promote learners' engagement and retention of educational content - they also enhance enjoyment of learning. Few studies have explored the use of active learning strategies in real world continuing professional development (CPD) for physicians, yet the accrediting bodies for these programs require 25% interactivity. We explored active learning strategies in accredited, large group conferences for physicians as these programs are the most widely attended local CPD programs.

Methods: Mixed methods study involving live researcher observation, interviews, and participant survey. Observation and survey data were collected on three conference formats: (1) in-person with in-person Q&A, (2) in-person with in-person and electronic Q&A, and (3) pre-recorded (virtual) with electronic Q&A only.

Results: The largest source of interactivity was the Q&A period, although educators used a variety of active learning strategies in all conference formats. The virtual setting had the most overall interactivity, followed by in-person with electronic Q&A. Both of the conferences with electronic Q&A periods had moderators who selected questions for discussion. Learners were more likely to report sufficient time for audience participation in the virtual setting.

Conclusion: In large group CPD conferences, the Q&A period accounts for most of the interactive learning time. More physician learners interacted with educators using electronic Q&A formats. Despite the limitations of large group and virtual settings, most speakers used a variety of strategies. As CPD offices continue to expand virtual conference offerings, our findings provide timely information on the nature of educator and learner engagement and interaction in large group settings.

OD 3-3

69116

Teaching professionalism during clinical rotations

Sue Murphy University of British Columbia, **Betsabeh Parsa** University of British Columbia

Background/Purpose: Professionalism is identified as a core entry-level competency of physical therapists (PTs) and is a curriculum requirement.

It is, however, challenging to teach and evaluate. Although observing and emulating the values and behaviors of role models during clinical rotations plays a major role in shaping students' professionalism, little is known about how physical therapy (PT) preceptors teach and evaluate professionalism during clinical placements. With the ultimate goal of developing supports and resources for preceptors for developing professionalism in the clinical setting, this study examined preceptors' perception of professionalism and their role in its development; perceived opportunities and barriers for enhancing student professionalism were also explored.

Methods: Using a survey research design, all clinical educators affiliated with the Master of PT program at the University of British Columbia were invited to participate.

Results: 49 preceptors completed the online survey. Over 94% of the participants were conscious of being a role model for professionalism and considered enhancing professionalism as part of their role. Although frequent opportunities for developing professionalism during clinical rotations were evident, preceptors expressed a strong need for educational resources focusing specifically on assessing (94%) and teaching (85%) professionalism. Measuring professionalism, enhancing students' communication and collaboration skills, and understanding conceptualizations of professionalism by today's generation were seen as key topics for professional development; case-based scenarios were suggested as effective education methods.

Conclusion: The information obtained from this study will guide the development of preceptor education materials focused on teaching and assessing professionalism in the clinical setting.

OD 3-4

69147

Developing a Virtual Learning-by-concordance Modules for continuing professional development for health professionals

Haifa Akremi Université de Montréal, **Nicolas Fernandez** Université de Montréal, **Khawla Mechichi** Université de Montréal, **Vincent Jobin** Université de Montréal, **Lise Lecours** Entreprise Le-Cours, **Ahmed Moussa** Université de Montréal, **Marie-France Marie-France Deschênes** Université de Montréal, **Bernard Charlin** Université de Montréal

Background/Purpose: Learning-by-concordance (LbC) has garnered much attention in continuing professional development (CPD) for health care professionals because of its high impact on learning, high adaptability to complex and uncertain situations and web-based dissemination. However, developing LbC modules is an elaborate and strenuous process that can be daunting. We aimed to document the process of creating LbC learning modules by observing LbC designers and panelists.

Methods: Three observational workshops of 90 minutes each with LbC designers (n=5) in medicine, nursing and physiotherapy were held on-line to document the process of creating LbC modules. A focus group with interdisciplinary experts in public health, immunology and nursing (n=4), panelists on LbC modules, was held to investigate their experience in sharing their clinical reasoning and explaining it in writing. All meetings were recorded and verbatims were analyzed thematically.

Results: Designing LbC hinges on finding alignment between target population needs, learning goals, clinical situations and coupling of hypothesis and supplementary data. Eight steps were identified for the development and validation of a LbC. Panelists revealed their deep-seated fear of being judged on their justifications to complex and uncertain situations. Justifying their initial response generated much discomfort. Integrating uncertainty and complexity in designing learning tasks is challenging for designers and panelists.

Conclusion: The documented process and focus group results are being invested in the development of a virtual platform to guide LbC module development. CPD teams will be able to develop LbC Modules quickly and in full compliance with principles of concordance.

OD 3-5

69442

Remediation as experienced by practising physicians

Gisele Bourgeois-Law University of British Columbia, **Lara Varpio** Uniformed Services University of the Health Sciences, **Glenn Regehr** University of British Columbia, **Pim Teunissen** School of Health Professions Education; Maastricht University

Background/Purpose: There is little published research examining remediation in practicing physicians from the perspective of remediatees. Understanding remediatees' perspectives may help those mandating and organizing remediation to structure the process in ways that improve the experience for all concerned parties and maximize chances of a successful outcome for remediatees.

Methods: We conducted interviews with 17 physicians who had undergone remediation for clinical competence concerns. Data analysis took place in two phases: the first was an iterative thematic analysis across participants and the second used narrative mode of analysis for each participant. Using a constructivist inductive research approach, we used Figured Worlds (FW) theory to help us interpret the data.

Results: Participants entering the FW of Remediation perceived that their position as a 'good doctor' was threatened. In response, remediatees used their agency to draw on various discursive threads within the FW to construct a narrative account of their remediation. These threads acted as tools with which participants constructed stories of their experiences to maintain their self-identity as 'good doctor'. In their narratives, participants tended to position themselves either as victims of regulatory bodies, or as resilient individuals who could make the best of a difficult situation.

Conclusion: Remediation is a threat to a physician's professional and personal identity. A heavy focus on the educational aspect of remediation-i.e., the improvement in knowledge and skills-risks missing its emotional impact on physicians. We need to support physicians in dealing with this identity threat, lest they defend themselves by adopting strategies that inhibit insight and motivation.

OD 3-6

69447

A mixed-methods study of learning to manage sleep disorder in family medicine

Sarah Cheung University of Calgary, **Martina Kelly** University of Calgary, **Maeve O'Beirne** University of Calgary, **Todd Hill** University of Calgary, **Trudy Huyghebaert** University of Calgary

Background/Purpose: Promoting safe sleep management is an educational priority for Choosing Wisely Campaign, Canada. Despite numerous guidelines, inappropriate prescribing for sleep disorder is widespread. Family physicians (FP) are responsible for substantial prescribing for sleep disorder. This study explores family medicine preceptor attitudes about prescribing for sleep disorder and how that relates to teaching sleep disorder management in clinical practice.

Methods: A social constructivist lens of learning informed our mixed-methods study. A survey of preceptor attitudes was sent to all preceptors affiliated with an urban family medicine program. Survey data informed qualitative interviews with preceptors about their management of sleep disorder, by inviting responses to a series of vignettes. Qualitative data were analyzed thematically, triangulated with survey findings.

Results: 47/76 preceptors (62% response rate; 56% female, 44% male); 32 worked in academic teaching clinics and 15 in community clinics. Preceptors reported expertise in non-drug treatment (71%). 76% felt confident teaching residents about sleep disorder management. Management of sleep disorder was identified as an emotional task, influenced by preceptor, patient and learner attitudes. Responses to vignettes and teaching strategies varied widely, influenced by patient ownership, learner continuity of care, and tolerance of uncertainty, reflecting inconsistencies in how sleep disorder was taught in the clinical workplace.

Conclusion: To improve management of sleep disorder, we need to better understand social influences on prescribing, in particular emotional aspects of negotiating with patients (and, possibly preceptors). Further attention to prescriber attitudes can inform pedagogical strategies around prescribing practices for sleep disorder.

OD 4: Empathy / Compassion

Glen 204 - CTCC

OD 4-1

69661

Videos as pedagogical tools to enhance awareness of medical student mistreatment

Alya Heirali University Health Network, **Nazia Viceer** University of Calgary, **Janet de Groot** University of Calgary, **Sarah Weeks** University of Calgary, **Deirdre Jenkins** University of Calgary, **Mike Paget** University of Calgary, **Kevin Douglas Busche** University of Calgary, **Sylvain Coderre** University of Calgary

Background/Purpose: Medical student mistreatment, reported by >60% of Canadian medical students, adversely impacts learner well-being, academic success and career choices. Mistreatment includes, but is not limited to public humiliation, racially offensive remarks or unwelcome sexual attention. To enhance awareness of mistreatment, we created brief videos of preceptor-student interactions as prompts to discuss mistreatment.

Methods: Standardized presentations included two videos informed by de-identified student experiences conveyed two forms of mistreatment: public humiliation and racism. Faculty development strategies to provide appropriate feedback were outlined. An experiential exercise regarding implicit bias and stereotyping followed the video with racial remarks. Consenting participants, responded to a 15-item survey regarding demographics, experiences of mistreatment, perceptions of mistreatment conveyed by the videos and the educational value of group discussions.

Results: Survey participants were predominantly female, and included faculty members, inter-professional clinicians and trainees. Previous mistreatment was endorsed by 72.5% (n=124), most commonly faculty to trainee. On a Likert scale from 1 (not at all mistreated) to 5 (extremely mistreated), respondents perceived that moderate mistreatment happened in both videos, and were more likely to identify that public humiliation rather than racist remarks occurred in their teaching/learning environments. Respondents rated the educational value of group discussion as moderately to extremely valuable.

Conclusion: Participants found educational value in discussing the videos. Many reflected on the potential adverse impact on patients who witness mistreatment. Future research directions will include patient perceptions of mistreatment, its impact on healthcare and the development and evaluation of simulations to address mistreatment in real-time.

OD 4-2

69214

[Survey of Medical Student Empathy at a Canadian Medical School: A Cross-sectional, Quantitative Survey](#)

Safina Adatia McGill, **Pierre-Paul Tellier** McGill

Background/Purpose: Within a medical context, empathy is defined as "an appropriate understanding and communication of a patient's experience." While it has been established that empathy is an important quality to have as a future doctor, studies have shown that empathy in medical students declines during their clinical years. However, there are no studies to date that evaluate medical student empathy in Canada. Therefore, we aimed to evaluate medical student empathy at McGill University Medical School using the Jefferson Scale of Empathy (JSE).

Methods: We used a cross-sectional study design and invited medical students across all 4 years, in October 2019, to complete the JSE. The JSE is a validated psychometric tool that measures empathy at one point in time. The survey was distributed via email and on social media.

Results: A total of 133 students from all 4 years responded, proportionate across each year. Differences in mean questionnaire were not statistically significant for gender (p=0.364), age (p=0.2746) or specialty interest (p=0.436). Differences in year of medical school was significant (p=0.0104). Between groups analysis revealed a statistically significant decrease between Med-2 empathy scores (average score 117.6) and Med-3 (107.5), p<0.01.

Conclusion: Our statistical analysis determined that medical students' empathy declines between the second and third year of medical school in a Canadian context, consistent with global results. This information can help us target changes in the medical curriculum to preserve empathy in students, and prevent this decline, which could then be applied to other medical schools internationally.

OD 4-3

69417

[Is there still a devil in the third year? A longitudinal study measuring empathy](#)

Anna Byszewski University of Ottawa, **Heather Lochnan** University of Ottawa, **Melissa Forgie** University of Ottawa, **Philippe Rousseau** University of Ottawa

Background/Purpose: Preserving an empathetic, humanistic approach has been linked to patient satisfaction, patient safety and physician wellness. This is particularly important in face of a pandemic and the call to foster an understanding of diversity. Medical schools must design their curricula to ensure attributes of professionalism that include empathy, altruism and other humanistic attitudes are instilled.

Methods: We tested medical students from year 1 to final year 4 at the University of Ottawa using the IRI (Interpersonal Reactivity Index) on a voluntary basis. The IRI was chosen on basis of solid psychometric properties. It is also freely available for use in English and French.

Results: 82 students responded in Year 1, dropping to 32 by Year 4 in 2020 (likely influenced by the start of the pandemic). Post hoc analysis was done with Bonferroni adjustment. On 3 measures of the IRI there was an increase from Year 1 to Year 3, maintained through to year 4. On the fourth measure, Personal Distress throughout the four years students had similar feelings of personal anxiety and unease in tense interpersonal settings with lowest scores.

Conclusion: Unlike previous studies demonstrating erosion of empathy in the third year, the IRI shows how empathy scores improved and then maintained in clerkship. This study demonstrates how the IRI can be used to evaluate curriculum interventions designed to enhance or reinforce empathy. Rationalization to employ the IRI is that empathy in medical students can improve the patient experience and contribute to professional identity formation (PIF) for future health professionals.

OD 4-4

69491

[How should health professionals provide digital compassion? A qualitative study to inform the development of professional competencies and technology attributes.](#)

Rebecca Charow Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Allison Crawford** Centre for Addiction and Mental Health; University of Toronto, **Nelson Shen** Centre for Addiction and Mental Health; University of Toronto, **Melody Zhang** University Health Network, **Sanjeev Sockalingam** Centre for Addiction and Mental Health; University of Toronto, **Peter Rossos** University Health Network; University of Toronto, **Sarmini Balakumar** Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Tharshini Jeyakumar** University Health Network, **Inaara Karsan** University Health Network; Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, **Brian Lo** Centre for Addiction and Mental Health; University of Toronto, **Mikayla Munnery** Centre for Addiction and Mental Health; University of Toronto, **Lydia Sequeira** Centre for Addiction and Mental Health; University of Toronto, **Sarah Younus** University Health Network, **Gillian Strudwick** Centre for Addiction and Mental Health; University of Toronto, **David Wiljer** University Health Network; Department of Psychiatry & Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto

Background/Purpose: Healthcare delivery continues to evolve from in-person to increasingly virtual experiences enabled by digital technologies. New approaches to preparing our healthcare professionals (HCPs) and activating our patients are required to use these technologies in providing compassionate care, i.e., digital compassion. Moreover, current health technology design and implementation processes may not facilitate digital compassion. The purpose of this study was to identify domains of digital compassion and provide appropriate education for HCPs.

Methods: This qualitative study is part of a modified eDelphi study to identify professional competencies for HCPs and technology attributes. Participants with over 5 years of experience in medical education, inter-professional practice, health informatics or digital health, and/or compassion research were purposively sampled. Virtual focus groups (4-10 participants each) were conducted between September and November 2020. Focus groups included a free-writing narrative activity and rapid thematic sorting on a digital post-it board. Thematic analysis followed an inductive, constant comparative approach.

Results: Nine focus groups were conducted (n = 55) with participants from 8 provinces in Canada. Three domains of digital compassion emerged: 1) digital readiness to design, adopt and evaluate technology with compassion in mind; 2) patient engagement to collaborate with patients to adopt and feel comfortable using digital health technologies; and 3) relationship building to build trust and foster a therapeutic alliance with patients when using digital health technologies.

Conclusion: With the immense shift towards virtualized healthcare, digital compassion becomes crucial to maintain quality care. Findings will inform recommendations for and development of digital compassion competencies and education for HCPs.

OD 4-5

69503

[Canadian Geriatrics Society (CGS) 2021 Aging Care 5 M competencies for Graduating Canadian Medical Students](#)

Thirumagal Yogaparan University of Toronto, **Martin Moran** University of Alberta, **Elizabeth Macdonald** Dalhousie University, **Karen Ng** University of Toronto, **Cheryl Sadowski** University of Alberta, **Alishya. Burrell** Western University, **Lara Khoury** University of Ottawa, **Cindy Grief** University of Toronto, **Jenny Thain** Western University, **Sid Feldman** University of Toronto, **Tammy Bach**, **Catherine Talbot-Hamon** McGill, **Sylvia Bell**, **Dilpriya Mangat** University of Manitoba, **Jeff Smallbone** University of Toronto, **Anicha Vikenswaran**, 'Shrujan Rai

Background/Purpose: To prepare future physicians for a growing aging population and changing healthcare environment, the Canadian Geriatrics Society Education Committee formed a working group in 2019 to revise the 2009 Core Competencies in the Care of Older Persons for Canadian Medical Students.

Summary of the Innovation: The working group chose the CGS 5M model to structure the competencies. A modified Delphi process was used to develop the 2021 Aging Care 5M competencies. National participants were recruited using CGS newsletters, geriatrics division academic center emails, and by contact lists. REB approval was obtained. Three rounds of Delphi surveys were conducted via survey monkey. A 7 point Likert scale was used for each competency statement. The first round was conducted in October 2019, n=72, identifying the importance and skill level of the components of the competencies under three headings; knowledge, skills and attitudes. The second round was conducted in September 2020, n=54, with proposed competencies under seven headings; aging, caring for older adults, (5Ms) mind, mobility, medications, multi-complexity and matters the most with > 70 % agreement for all. Based on the strength of the agreement and comments, minor revisions were made and the final survey was conducted in June 2021. The agreement level for competencies varied from 85 - 98 %.

Conclusion: Thirty-three core geriatric competencies for the graduating undergraduate medical student were developed and classified under 7 headings. The framework will be distributed to the accreditation and examination bodies and Canadian medical schools and will be published in a peer reviewed journal.

OD 4-6

69679

[The Senior Citizen Partnership Program (SCPP): Am innovate educational approach to challenging medical students' attitudes towards older adults](#)

Ute Hauck Curtin Medical School

Background/Purpose: Doctors require exemplary communication skills and the right attitude to care for the growing number of elderly patients. Early exposure to the elderly in medical courses has been shown to help change student attitudes and challenge thinking in stereotypes.

Summary of the Innovation: The SCPP runs for the duration of the MBBS course and aims to introduce students to 'healthy ageing'. Two students are partnered with a senior citizen residing in a retirement facility. The students meet their senior partner a prescribed number of times, forming a partnership rather than viewing them as a patient. During these encounters students enquire about social, psychological, environmental and health impacts on the life of the senior, while practicing communication skills taught in clinical skills. Students also attend debriefing sessions and submit reflections about their encounters addressing relevant learning objectives using a reflective framework. Data collected from surveys, debriefing sessions, students´ assignments and

focus groups demonstrate an increased awareness about the elderly generation, acknowledging that previously held stereotypes and reservations were challenged. Students recognise the diversity in this population and the individual needs of seniors, relevant to them as future doctors. The interaction allows students to overcome initial hesitations to approach the elderly, and fosters relevant communications skills by providing authentic experiences.

Conclusion: A programme which enables students to foster a trusting partnership with elderly people during early exposure in a medical course can help to change the attitudes of medical students.

ODV 5: UGME Teaching & Learning

Virtual 1

ODV 5-1

69629

[Becoming Anti-Racist: Evaluating an Anti-Racism Training Session Among Medical Students](#)

Whitney Ereyi-Osas University of Calgary, **Tyler Warnock** University of Calgary, **Tharsini Sivananthajothy** University of Calgary, **Matthew Skarsgard** University of Calgary, **Pamela Roach** University of Calgary

Background/Purpose: George Floyd, Breonna Taylor, Brian Sinclair, and Joyce Echaquan are only a few of the many lives lost to systemic racism, sparking conversations about its ongoing role within medical institutions (1-3). To achieve progress in eliminating health inequities impacting Indigenous, Black, and other racialized folks accessing the health systems in Canada, medical institutions must take immediate action to incorporate anti-racism as a competency for all medical learners. In line with this goal, this study aims to evaluate and document the impact of a student-organized anti-racism training session for undergraduate medical students.

Methods: Session content was developed after paid consultation sessions with medical students and faculty from equity-deserving communities along with a review of current literature, and was led by an Afro-Indigenous facilitator. Demographic information and data on participants' perceptions and beliefs before and after the training session were gathered retrospectively through a survey. Data will be analyzed using paired t-tests and framework analysis.

Results: 50 medical students from across Alberta attended the full-day, online training session. Early results showed that students gained skills related to active listening, and saw the potential for application within a clinical setting. A barrier to application of skills identified was a lack of reinforcement within medical education.

Conclusion: An incorporation of anti-racism training into medical education was positively received by students and demonstrated impact on actions and beliefs. Further research is needed to determine the most effective methods to incorporate longitudinal anti-racism teaching within medical education to reinforce and support transformative learning.

ODV 5-2

69464

[A Student-led Anti-racist Curricular Review of Pre-clinical Material at McGill University's School of Medicine](#)

Juliette St-Georges McGill, **Liam Cooper-Brown** McGill, **Victoire Kpadé** McGill, **Nickoo Merati** McGill, **Mélanie Mondou** McGill, **Saleem Razack** McGill

Background/Purpose: Systemic racism has been proposed as a cause of adverse health outcomes' higher incidence among patients who are Black, Indigenous, and People of Colour (BIPOC) than among their White

counterparts. Assumptions underlying medical training, influenced by colonial norms, may impact physicians' cultural competency more than the formal curriculum. This may manifest as Whiteness being over-represented in didactic materials. Recognizing and correcting the influence of systemic racism on medical professionals' training could therefore improve patient care.

Summary of the Innovation: Undergraduate medical students, in collaboration with key faculty members, led a curricular review of pre-clerkship educational lectures that aims to identify inequities in medical training and act on them to help implement an anti-racist medical curriculum. A tool, adapted from Queen's University, was developed to identify five general categories of inequities in: skin, clinical measurements, genetics and epidemiology, language, and imagery. Volunteers were recruited with priority given to BIPOC-identifying students. Lectures were reviewed by two independent reviewers and conflicts were resolved by a course leader, yielding an inequity inventory for each course. Students met with the faculty clinician responsible for their course to discuss their inequity inventory and sought educational materials to remedy the inequities.

Conclusion: Few medical schools have undertaken a complete student-led review of their pre-clinical undergraduate curriculum using an anti-racist lens. This study offers an innovative framework to approach inequitable attitudes that may underly medical curricula, describes lessons learned to improve future iterations of the review process, and contributes to the important, evolving field of anti-racist medical training.

ODV 5-3

69327

Teaching Medical Students to Teach: A Narrative Review of Student-as-Teacher Curricula

Alexandra Cohen University of Ottawa, **Yvonne Steinert** McGill, **Elisa Ruano Cea** McGill

Background/Purpose: Medical students play a crucial role in teaching peers and junior trainees. While formal preparation for the teaching role is well-established at the postgraduate level, teaching skills training is limited in undergraduate medical education (UGME). We conducted a narrative review to comprehensively synthesize the Student-as-Teacher (SaT) literature with the goal of proposing strategies for curriculum development.

Methods: We searched Medline, Embase, and Scopus databases to identify articles published between 1985-2020 related to teaching medical students to teach. Search terms included 'student(s) as teacher(s)', 'near-peer teaching', and 'teaching to teach'. The selected articles were summarized and synthesized.

Results: Forty-three articles met inclusion criteria: 33 SaT program descriptions, 3 literature reviews, 6 surveys, and 1 Delphi study. Our findings highlight a paucity of teaching skills training in UGME despite medical students routinely engaging in teaching roles. Existing SaT curricula were usually optional courses targeting senior students. Course content of these curricula commonly included planning and delivering learning activities and providing feedback. Additional content areas recommended by stakeholders included assessing teachers and learners, promoting a safe learning environment, role modeling, mentorship, and professionalism as medical educators. Students indicated a preference for interactive and experiential learning, and valued direct observation and feedback as assessment methods. Program evaluations showed positive outcomes, highlighting student satisfaction and enhanced self-confidence as teachers.

Conclusion: Our findings highlight the need to enhance teaching skills training in UGME. This review also provides insights into literature-informed strategies for SaT curriculum development, specifically regarding content areas, teaching modalities, and assessment methods.

ODV 5-4

69385

The Eye Curriculum Ambassador Program: A national program to facilitate collaboration amongst medical students in ophthalmology education and development.

Emaan Chaudry University of Ottawa, **Danielle Solish** Queen's University, **Jim Denstedt** University of Ottawa, **Danah Albreiki** University of Ottawa

Background/Purpose: Prior to elective rotations, medical student exposure to ophthalmology across Canada is limited. Moreover, research shows a gradual decrease in the role of ophthalmic medical education in standard curriculums and a diminishing overall rate of clinical ophthalmology rotations across the United States and Canada. A reduction in exposure raises concern for the future of ophthalmology as increased exposure has shown to be directly related to the quantity of students who apply to this specialty.

Summary of the Innovation: Launched in January 2021, Eye Curriculum (EC) is a website that collates ophthalmology resources in one location, accessible to medical students internationally. EC provides medical students with a convenient and credible tool to enhance their knowledge of ophthalmology without geographic restriction. A student ambassador program (AP) was created to serve as an innovative method to increase engagement with medical education resources. Ambassador engagement and educational development was enhanced through the development of three teams (13 students), responsible for development of educational flowcharts with treatment algorithms, the development of mock cases and the publishing of research summaries about new ophthalmologic advancements. Support outlets at the peer, resident and staff level were also utilized to promote collaboration and assist with challenges that may arise.

Conclusion: The increased use of technology in medical education during the COVID-19 pandemic has allowed for the development of virtual ophthalmology resources such as EC. The EC AP provides a successful model, allowing similar programs to be implemented across other specialties.

ODV 5-5

69580

Teaching the Psychiatric Interview

Tim Hierlihy Memorial – University of Newfoundland, **Andrew Latus** Memorial – University of Newfoundland

Background/Purpose: This presentation discusses an approach to teaching the psychiatric interview developed at Memorial University of Newfoundland and Labrador over the last several years. Although the psychiatric interview is the cornerstone of psychiatric assessment, the literature on approaches to teaching it is quite limited. A review of the literature did not identify an approach that was clearly effective for teaching the interview, so we set out to develop our own.

Summary of the Innovation: The approach is based on two key elements: 1. The interview is taught in discrete pieces initially (e.g., gathering a patient ID, screening for depressive disorders, etc.) over 3 small group sessions before being assembled into a whole interview in the final session. 2. The psychiatrists/residents leading the sessions serve as the 'standardized patients' for these sessions working from prewritten cases but with leeway for improvisation in order to challenge or direct students.

Taken together, these elements allow students to receive real-time feedback on their approach and also to repeat and vary their approach in response to that feedback.

Conclusion: The approach has been well received by students. In both of the two years prior to full implementation of this approach, third-year medical students at Memorial rated their satisfaction with psychiatry clinical skills teaching at 3.9/5 with the score increasing to 4.7/5 and 4.9/5 in the two years since the approach has been implemented. As a side benefit, the approach lends itself well to remote delivery so it has continued to function well during the disruption resulting from COVID-19.

ODV 5-6

69685

Watch This! Bilingual Flipped Classroom Videos to Enhance the Preclerkship Learning Experience

Deeksha Kundapur University of Ottawa, **Wassim Karkache** University of Ottawa, **Christopher Tran** University of Ottawa

Background/Purpose: Tutor-facilitated small and large group learning is common in preclerkship medical education, yet participants often feel that students are ill-prepared for formal teaching sessions. A flipped classroom approach, e.g. assigning educational videos for pre-class learning, can improve both learner satisfaction and engagement during teaching sessions. We report the development, implementation, and evaluation of educational videos for flipped classroom use at a bilingual medical school.

Summary of the Innovation: Informed by a formal needs assessment (literature review, pre-survey), we created educational videos mapped to formal objectives for a four-week preclerkship Endocrinology block. Using a storyboarding approach, videos were created by matching spoken script (in both English and French) to hand-drawn animations. Multiple choice questions (MCQs) were created using Medical Council of Canada guidelines. We created a total 22 videos (11 English, 11 French), 24 MCQs, and a PDF summary containing links to videos and their corresponding objectives, MCQs, and lists of lectures and small group sessions relevant to each video. Our videos have garnered over 4,000 views, thus many students watched the videos more than once. As per post-survey data, most respondents felt videos were appropriate length (range 5-15 minutes, average 7.6 minutes) and number. Satisfaction scores were favourable with over 90% selecting 'agree' or 'strongly agree' to most prompts. Many free-text comments in both our post-survey and a formal preclerkship evaluation report included praise for the project.

Conclusion: Educational videos to help preclerkship students prepare for teaching sessions were well-received. We aim to incorporate a similar approach to other rotations, within preclerkship, clerkship, and beyond.

ODV 6: Unlearning the focus on medical expert

Virtual 2

ODV 6-1

69294

Medical students perspectives on how their participation in an initiative to address racial disparities in access to bone marrow donors supported their development across canMEDS non-medical expert (NME) roles

Warren Fingrut Stem Cell Club, **Ari Cuperfain** University of Toronto, **Eugenia Piliotis** University of Toronto

Background/Purpose: Although recognized as essential for medical trainees to develop, the CanMEDS NME roles are challenging to teach. Stem Cell Club (SCC) is a recruitment organization which works to address racial disparity in access to matched unrelated bone marrow donors facing patients from Black, Indigenous, and other racial/ethnic groups. Students in SCC organize recruitment events where they educate people from diverse racial/ethnic groups about this disparity and engage them to become donors.

Methods: We surveyed 58 medical students in SCC (response rate 23%) from 8 schools (median 20hrs participation in SCC) to learn their perspectives on the impact of their involvement on their development as physicians.

Results: The majority felt their involvement with SCC: 1) contributed to their development as physicians across the NME roles (90%), and specifically as health advocates (91%), communicators (88%), and leaders (88%); and 2) supported skill development including: contributing to improving a healthcare system (91%); improving the health of populations (91%); obtaining informed consent (88%); teaching health topics to the community (88%); protecting privacy and confidentiality (84%); and understanding the impact of social determinants of health (78%). Qualitative analysis identified rich examples of skill development across the NME roles and the application of those skills to other areas in medicine.

Conclusion: In summary, a national cohort of medical students in Canada felt that working to address racial disparity in access to marrow donors shaped their development as physicians across the CanMEDS NME roles. Programs such as SCC should be considered in curriculum development for teaching these abilities.

ODV 6-2

68840

Reflection on Professionalism: Retrospective Review of Health Professional Student Reflections

Donna Drynan University of British Columbia, **Sue Murphy** University of British Columbia, **Tal Jarus** University of British Columbia

Background/Purpose: Professionalism is a core competency for many health professional programs, however, lack of a clear definition of professionalism makes it a complex concept to teach. Most proposed frameworks for defining professionalism are theoretical or have focused on the academics' and clinicians' perspectives; evidence from students' experiences is lacking. The purpose of this study was to develop a framework to define the concept of professionalism from occupational therapy (OT) and physical therapy (PT) students' perspectives.

Methods: The study was a retrospective content analysis of OT and PT students' reflections completed during mandatory clinical placements from 2014-2015 academic years. The qualitative content analysis was completed by applying a deductive approach using previously presented frameworks to define professionalism.

Results: Four themes emerged which resulted in a new framework to define professionalism from students' perspectives. Emergent themes included the effect of context, the relational dimension, personal dimension, and societal dimension. Students considered context an overarching factor influencing all the other dimensions of professionalism. Although their perceptions of professionalism were comparable to other previously presented frameworks, in our study they primarily focused on the relational and personal dimensions.

Conclusion: The results of this study indicate that OT and PT students consider professionalism as a multi-dimensional and context-specific concept. Despite understanding contextual barriers, during training, students tried to adhere to ethical principles, and professional values and responsibilities. The results of this study are helpful in developing the professionalism curriculum for health professional learners.

ODV 6-3

69343

[Scholarly Opportunities for Medical Students and Residents in Canadian Medical Specialty Organizations](#)

Mitchell Thatcher University of Saskatchewan, **Adam Wandzura** University of Saskatchewan, **Mckinley Smith** University of Saskatchewan

Background/Purpose: Participation in medical specialty organizations may provide medical students and residents with additional research, advocacy, networking, and leadership opportunities. Although some authors have looked at individual specialty organizations in the United States, little is known about trainee involvement in Canadian organizations. Therefore, the aim of this study is to review the current level of medical student and resident involvement within Canadian medical specialty organizations.

Methods: The websites of 71 Canadian medical specialty organizations were reviewed to assess levels of trainee participation. Organizations were asked to verify the information through email.

Results: Of the 71 Canadian medical specialty organizations reviewed, 42 (59%) allow medical students and 67 (94%) allow residents to become members. When trainee membership is allowed, it is free for students in 22 organizations (52%) and free for residents in 35 organizations (52%). Most organizations allow trainees to attend their annual conference (83% for students and 93% for residents), and the mean cost of attending the most recent virtual conference was $114 (range: 0 to 475) for students and $142 (range: 0 to 475) for residents. 22 organizations (31%) have travel awards for students and 37 (52%) have awards for residents. Research grants are available in 58% of organizations for students and 79% for residents. Formal mentorship programs exist in 16 organizations (23%) for students and 25 (35%) for residents.

Conclusion: This study highlights the educational opportunities available to trainees within Canadian medical specialty organizations. These opportunities serve as an important source of professional development for the next generation of Canadian physicians.

ODV 6-4

69439

["Through a…Tainted Lens": learner's perceptions of which patients deserve advocacy](#)

Maria Hubinette University of British Columbia, **Renate Kahlke** McMaster University, **Theresa van der Goes** University of British Columbia, **Ian Scott** University of British Columbia

Background/Purpose: In an effort to remediate health disparities, society has charged physicians to advocate for or with patients. Understanding how medical learners engage in advocacy is important since these implicit or explicit decisions may support narrowing or exacerbating health inequities. This study sought to explore how medical learners make decisions about advocating with patients.

Methods: We purposefully sampled a diverse group of medical students and residents from across multiple sites at the University of British Columbia, including undergraduates and residents. Interviews were transcribed and analyzed using standard qualitative methods.

Results: Learners reported that their decision to advocate for a patient was dependent, in part, on their perceptions of whether the patient "deserved" their advocacy efforts. Learner's assessments of deservingness aligned with one or more of five domains: control, attitude, identity, reciprocity and need.

Conclusion: Learners made, often implicit, decisions about whether or not to advocate with a patient based on their judgment of how deserving the patient was of advocacy. Deservingness assessments fell into the following domains: the patients control over or responsibility for their own health status, the patient's attitude toward their care and their healthcare team, how much the leaner identified with the patient, the patient's effort to improve their own health situation and patient's need, relative to other patients. This work has implications for understanding how providers choose to take or not take actions in the care of patients and may demonstrate a mechanism for the impact of provider bias on patient care.

ODV 6-5

69474

[Développement d'un modèle collaboratif en gestion de projet valorisant l'expertise étudiante: Exemple du projet Aventure Médecine](#)

Isabelle Tapp Université Laval, **Maxence Brouillette** Université Laval, **Sarah Harvey** Université Laval, **Joey Lavoie** Université Laval, **Julie F. Thériault** Université Laval, **Robert Garon** Université Laval

Background/Purpose: En 2019, l'Université Laval annonce la délocalisation de son programme de médecine sur les sites de Lévis et Rimouski pour l'automne 2022 en collaboration avec l'UQAR, le CISSS de Chaudière-Appalaches et le CISSS du Bas-Saint-Laurent. Ce projet constitue une initiative sans précédent sur les plans logistique, éducatif et collaboratif au Canada.

Summary of the Innovation: Le projet Aventure Médecine innove en intégrant une rétroaction étudiante continue dans ses processus décisionnels. Contrairement aux approches traditionnelles visant à limiter le nombre de parties prenantes pour mitiger les risques d'outrepasser les coûts et l'échéancier, les quatre partenaires font le pari d'impliquer les étudiants dans la majorité des groupes de travail. Ils créent aussi le Comité Aviseur étudiant, une instance consultative ayant émis plus de 50 avis en un an concernant l'architecture des pavillons, les critères d'admission, l'enseignement comodal, l'exposition clinique et la vie associative, entre autres. La constance des rétroactions étudiantes optimise les processus décisionnels et cristallise son importance dans le développement d'approches innovantes adaptées aux apprenants en médecine.

Conclusion: L'efficacité du développement des campus médicaux délocalisés comme solution au recrutement d'effectifs médicaux en région n'est désormais plus à prouver; ainsi, de telles initiatives sont appelées à se multiplier à l'avenir. L'approche d'Aventure Médecine innove en proposant de désapprendre la manière usuelle de délocaliser des programmes de médecine au pays. Elle démontre l'efficacité d'impliquer les étudiants dans un tel projet et propose un organigramme de gouvernance valorisant l'expertise étudiante ainsi qu'un modèle reproductible de collaboration pour le déploiement de futurs campus délocalisés.

ODV 6-6

69515

[Exploring the role of Digital Media in influencing Health Advocacy](#)

Divya Santhanam Western University, **Javeed Sukhera** Hartford Hospital; Yale University, **Teresa Chan** McMaster University, **Kori LaDonna** University of Ottawa

Background/Purpose: Increasingly, physicians and medical learners are turning to digital media platforms such as Twitter, Instagram and blogging sites to advocate for a variety of causes. The role of digital media in influencing health advocacy, particularly shared health advocacy between health professionals and patients is an under-explored topic. We sought to explore how digital media influences teaching and learning about

health advocacy and whether it can potentially strengthen advocacy efforts to enact meaningful change.

Methods: We utilized constructivist grounded theory. 14 participants, consisting of 7 learners and 7 medical professionals across North America participated in semi-structured qualitative interviews. We asked participants to define digital health advocacy and describe their experiences using digital media platforms in relation to health advocacy topics. We used line-by-line coding with constant comparative analysis to engage in transcript analysis. .

Results: The digital advocacy space is fraught with tensions. Digital media facilitates an environment where traditional power dynamics are both reinforced and upended between professionals, learners and patients. In addition, we found considerable tensions between how digital advocates navigate their personal and professional identities due to pressures to conform with existing conceptualizations of health advocacy. Circumstances where health advocates belonged to more than one identity group (professional, learner, patient) were found to be both challenging and impactful.

Conclusion: Our findings suggest that digital media has transformative potential to shape teaching and learning about health advocacy in the future. However, challenges and tensions related to identity and power asymmetries must be considered by educators in the design of future curricula.

ODV 7: CPD COVID

Virtual 3

ODV 7-1

68848

[Exploring Virtual Teaching Approaches Among Pediatricians During the SARS-CoV-2 Pandemic: A Virtual Ethnographic Study.](#)

Marghalara Rashid University of Alberta, **Julie Nguyen** University of Alberta, **Jessica Foulds** University of Alberta, **Sarah Forgie** University of Alberta

Background/Purpose: During the SARS CoV-2 pandemic, Canadian postsecondary institutions were forced to rely on online teaching to comply with public health's social distancing recommendations. The sole reliance to deliver synchronous teaching sessions in medical education was a novel approach for instruction delivery. We found little empirical research examining pediatric educators' experience. Hence, the objective of our study was to describe and gain a deeper understanding of pediatric educators' perspectives, focusing on the research question, "How is synchronous virtual teaching impacting and transforming teaching experiences of pediatricians during a pandemic?"

Methods: A virtual ethnography was conducted guided by an online collaborative learning theory. This approach used both interviews and online field observations to obtain objective descriptions and subjective understandings of the participants' experiences while teaching virtually. Pediatric educators (clinical and academic faculty) from our institution were recruited using purposeful sampling and invited to participate in individual phone interviews and online teaching observations. Data was recorded and transcribed, and a thematic analysis was conducted.

Results: Fifteen front line pediatric teachers from our large Canadian research-intensive university were recruited. Four main themes, with sub-themes, emerged: (i) The love/hate relationship with the virtual shift; (ii) self imposed pressure to increase virtual engagement; (iii) Looking back, moving forward; (iv) Accelerated adaptation and enhanced collaboration.

Conclusion: Pediatricians adopted new delivery methods quickly and found many efficiencies and opportunities in this shift. Continued use of virtual teaching will lead to increased collaboration, enhanced student engagement strategies and blending the advantages of virtual and face to face learning.

ODV 7-2

69456

[UBC CPD's Rapid COVID-19 CPD Response: A Story of Lessons Learned in Unprecedented Times](#)

Stephanie Ameyaw University of British Columbia, **Bob Bluman** University of British Columbia, **Brenna Lynn** University of British Columbia, **Kathryn Young** University of British Columbia, **Bruce Hobson** University of British Columbia

Background/Purpose: UBC's Division of Continuing Professional Development (UBC CPD) is a trusted source of education for health care providers (HCPs). When faced with COVID-19, UBC CPD has been uniquely positioned to meet these challenges, adopting new educational approaches to address HCPs' urgent and emerging needs during the pandemic.

Summary of the Innovation: In response to the learning needs related to the COVID-19 pandemic, UBC CPD rapidly mobilized to develop and deliver timely, concise, and meaningful education and resources to BC HCPs. From March 2020 to September 2021, UBC CPD delivered 37 COVID-19 webinars to over 20,000 live virtual attendees, averaging 750 attendees per webinar, plus nearly 10,000 webinar recording downloads. Participant evaluation surveys and internal focus groups identified key success factors: an iterative process for ongoing needs assessments, high capacity virtual platform, with skilled moderation and ability to respond to audience needs in real time; presenter diversity and expertise; and flexible delivery formats.

Conclusion: UBC CPD pivoted to meet HCPs needs delivering timely, accessible, and much needed education. Since March 2020, UBC CPD's COVID-19 response has evolved through the implementation of rapid quality improvement cycles at all levels, including how to plan and deliver webinar education within a short turnaround time, select and train moderator and panel experts, refine topics, and identify technical solutions, learnings that the boarder field of CPD can learn from. Timely and highly valued educational offerings to meet the COVID-19-related learning needs of BC HCPs has provided critical support to help them successfully manage their patients and cope with the COVID-19 pandemic.

ODV 7-3

69463

[Examining the impact of COVID-19 on discourses of wellbeing in interprofessional collaboration](#)

Maya Fields University of Toronto, **Brett A. Diaz** University of Toronto, **Stella Ng** University of Toronto, **Elizabeth McLaney** Sunnybrook Health Sciences Centre, **Tracey DasGupta** Sunnybrook Health Sciences Centre, **Sabrina Bartlett** University of Toronto

Background/Purpose: The COVID-19 pandemic disrupted the ways teams work together, introducing role shortages, questions of scope and role clarity, organizational uncertainty, and shifting models of care. To contribute to understanding of how COVID-19 affected interprofessional collaboration (IPC), we undertook a discourse analysis of two annual multi-institution IPC professional conferences, one from 2020, several months into the pandemic, and one from 2021, over a year into the pandemic. The discourse analysis focused on emotional dimensions of talk. The conferences consisted of panel discussions and formal presentations by experienced professionals focused on advancing IPC.

Methods: We inductively coded transcripts of both conferences, creating and applying codes by identifying themes, topics, and issues, with regular

meetings to review and reach agreement on codes. We coded for What presenters talked about, such as team roles, sharing narratives, or expressing values of IPC, and How they talked: evaluation (positive, negative), arousal (high, low), and epistemic certainty.

Results: Through the analysis process, we noticed that talk about wellbeing, prompted by the pandemic, appeared both covertly and explicitly in IPC. Initial findings include (1) explicit references to wellbeing were fewer in the 2021 conference, (2) wellbeing was associated with cognitive and social concepts, specifically psychological safety and strategies for team communication, and (3) navigating conflict became a substantial topic in the 2021 conference.

Conclusion: Our results suggest how COVID-19 has impacted talk about wellbeing in IPC. Our findings have implications for how teams, organizations, and institutions-at-large can address team wellbeing, and implement systems change to support wellness in interprofessional health settings.

ODV 7-4

68813

Leaving the white coat behind: physicians exploring non-clinical work possibilities in an online community

Marilyn Champagne University of British Columbia, **Kevin Eva** University of British Columbia

Background/Purpose: Increasingly physicians are choosing to work part-time, to retire early, or to change careers altogether. Burnout has been identified as one of the reasons leading physicians to want to quit practice. Unfortunately, we still know too little about how to intervene to support physicians grappling with such challenges. Recently, the phenomenon of non-clinical "side gigs" (i.e., employment outside what is traditionally associated with a medical career) has become a popular topic of discussion in social media as a means to keep physicians well, motivated and able to stay in the medical workforce. Although there are conferences, podcasts, blogs and online forums that discuss non-clinical work for physicians, however, this possibility has been largely absent from the scientific literature.

Methods: This naturalistic observational study examined physicians who have or are looking into side gigs by thematically analyzing postings in a closed Facebook group for physicians. The main research question guiding was "How do physicians who are undertaking or considering undertaking side gigs describe their reasons and the value they obtain from that work?" Sub-questions included "Does this group frame their side gigs in relation to wellness?" and "How do they describe the impact of non-clinical side gigs on their clinical work?"

Results: Two main themes were identified: regaining a sense of autonomy (including control over practice patterns and work-life balance), and frustration with equity.

Conclusion: By exploring the phenomenon of side gigs, we offer a unique angle from which to better understand burnout and physician wellness, physician identity and work/life balance.

ODV 7-5

69557

A Frame within a frame - Innovation to Overcome the Obstacle of Hands-on Learning in the Virtual Learning Era

Xihan (Sheila) Sun Mielke University of Calgary, **Chloe Burnett** University of Calgary, **Ryan Endersby** University of Calgary, **Sharon Blyth** University of Calgary, **Esther Ho** University of Calgary

Background/Purpose: The COVID-19 Pandemic has brought on an era of virtual CPD activities. Procedural skills education which mainly involves hands-on learning, has been the most challenging. The University of Calgary Office of CME&PD runs a hands-on ultrasound-guided nerve block workshop annually for the Rural GP Anesthesia Conference. An innovative approach was needed for delivering comparable teaching and learning experience in the virtual space.

Summary of the Innovation: Using a frame within a frame, the faculty team and CME&PD innovation team pre-recorded faculty demonstrating various nerve blocks on a standardized patient. The technique allows for the simultaneous correlation of the scanning location on the patient and the ultrasound anatomy. Participants watched this at the beginning of the live workshop, followed by a highly interactive discussion and Q&A. The exact setup for recording (location of the ultrasound machine, standardized patient, cameras, and technical crew) allowed for the ease of live demonstration. Multiple video feeds were enabled to switch between live demonstration, presentation slides, and the pre-recorded video.

Conclusion: It was the shared vision and dedication by the course team that made this innovative educational activity happen. We gained valuable expertise and unique insights from participants' feedback, including general frustration during the Pandemic, recognition of the technical challenges instructors and learners face, and appreciation for the intention and innovative attempt. Remotely teaching procedural skills is possible, and with the increasing demand for accessible and virtual CPD, it is worth exploring the integration of merging innovation within robust CPD programming.

ODV 7-6

69394

Mapping of the faculty's educational, operational, and societal activities during the first wave of the COVID-19 pandemic: key messages and avenues for action.

Juliette Monnier Université de Montréal, **Ahmed Maherzi** Université de Montréal, **Philippe Karazivan** Université de Montréal, **Imane Benaskeur** Université de Montréal, **Robert Gagnon** Université de Montréal, **Christian Bourdy** Université de Montréal, **Vincent Dumez** Université de Montréal, **Julie Gosselin** Université de Montréal

Background/Purpose: The COVID-19 pandemic has created disruptions within the Faculty of Medicine that are very likely to mark a turning point in its operations if not its missions. We wanted to identify the pedagogical, operational and societal actions undertaken by the faculty's community in response to the pandemic.

Methods: A survey targeting training, evaluation, research, management and outreach as well as the level of social commitment and collaboration with civil society was conducted. Between July 8 and August 31, 2020, a questionnaire was distributed to 297 members of different sectors of the faculty: professors and lecturers, researchers, health professionals, student representatives, patient partners and administrative staff.

Results: 177 people (60%) responded with an analyzable response rate of 50% (147/297). A total of 320 actions were identified in relation to teaching (181), research (42), care (37) and community engagement (60).

The majority (84%) were unprepared for this crisis, and 76% had a finalized or ongoing plan to better cope with a new pandemic. Respondent adaptation, withdrawal of undergraduate students from practicum settings, cancellation of mini-admissions interviews, and intra-faculty communication were among the reported interventions.

Conclusion: The study we conducted suggests that potential interventions for better health crisis preparedness can target the role of students as agents of change, distance education, health in times of disaster, interdisciplinarity and collaboration with communities and strengthening the role of the faculty in popularizing knowledge for the population in times of crisis.

ODV 8: Relearning teaching

Virtual 4

ODV 8-1

69019

Pilot Implementation of a Student-Centered Virtual Flipped Classroom Curriculum to Teach Renal Pathophysiology to Medical Students in the COVID Era

Alexis del Vecchio Mayo Clinic, **William Roudebush** University of South Carolina School of Medicine – Greenville

Background/Purpose: As far as we are aware, this is the first initiative of its kind at a North American medical school were the creation, curation and delivery of core medical content were initiated by a medical student to his peers. Collaborating with a Faculty member who peer-reviewed all content, our initiative replaced in-person lectures with an entirely online, interactive curriculum. A fourth-year medical student and Faculty member collaborated to create an entirely online course to deliver renal pathophysiology content to preclinical medical students. The course was narrated with an engaging voice-over provided by the medical student, and included clinical vignettes, practice & board questions, striking visuals, and "STEP Board Alerts".

Summary of the Innovation: Students increased their performance on school exams from a mean of 74.13% to 80.04%, a 6-point or 8% increase, which was not statistically significant. Class time decreased by more than 50%. Student comments included: "I appreciated these materials and how there were Step 1 alerts and clinical correlates throughout. I personally thought this was an upgrade from having a live lecture." and "I really appreciated the idea behind these being to best prepare us for Step 1 and save time on lectures. I wish all lecturers had that mentality."

Conclusion: Students improved their performance on school exams testing content delivered via this novel approach. They spent less time in lectures. In the COVID era, this online curriculum suggests it may be possible to implement initiatives that minimize in-person learning and lecture contact time, while maintaining or improving class performance for medical students.

ODV 8-2

69301

Measuring what counts: Analysis of a university-wide clinical teacher assessment tool

David Rojas University of Toronto, **Samantha Inwood** Women's College Hospital, **David Tihanyi** University of Toronto, **Margit Gill** University of Toronto, **Caroline Abrahams** University of Toronto, **Susan Glover Takahashi** University of Toronto

Background/Purpose: Teacher assessments are quintessential components of program evaluation and quality improvement processes in medical education. Unfortunately, assessments of teachers are noted to be subject to bias, creating structurally oppressive barriers that are amplified when assessment scores are used in high stakes decisions (e.g., promotions, awards, identification of poor performance). At the University of Toronto's Temerty Faculty of Medicine (TFoM), we have designed and implemented a new Learner Assessment of the Clinical Teacher (LACT) form that aims to address issues of bias, response rate, and perceived retaliation.

Summary of the Innovation: We introduced the LACT form across all clinical departments for all medical learners including clerks, residents and fellows in the TFoM in Summer 2020. With a common teacher assessment tool we were able to synthesize data across the learning continuum. The LACT tool was evaluated after 1 year of implementation using descriptive analyses of teacher assessment scores and inductive thematic analyses of learner comments in the form. Results from these analyses informed a series of focus groups with clerks and residents to gain insight on learners' understandings and use of the tool. Additionally, we conducted faculty focus groups to include all stakeholders perspectives.

Conclusion: Our comparative analyses and mixed methods approach identified contextual differences across departments. Differences in the number of total assessments completed and comments provided between departments suggest cultural effects might be at play. The data also indicated ways to refine the tool and improve its usability as well as content and construct validity.

ODV 8-3

69338

Evaluating outcomes of open inquiry-based learning innovations in the health professions

Subhrata Verma University of Toronto, **Marina Yacob** University of Ottawa, **Amrit Kirpalani** Western University

Background/Purpose: Open inquiry-based learning (IBL) aims to foster higher-level thinking, with students formulating their own questions and learning through exploration. The present study aimed to summarize the breadth of metrics used to evaluate health professions trainees in open IBL curricula.

Methods: We conducted a scoping review to identify publications detailing trainee outcomes in open IBL initiatives in health professions education. We queried five databases and included studies which described interventions with five phases of IBL (orientation, conceptualization, investigation, conclusion, and discussion). We completed abstract and full text reviews in duplicate. Data were collated and summarized.

Results: From 3030 record, 21 studies were included in the final extraction (k=0.94), with nine in physician trainees and twelve in nursing trainees. Only three studies used a validated data collection tool to measure student inquiry behaviour, with most studies (n = 16) reporting trainee self-reported satisfaction or perceived gain of skills as the primary outcome. A single study measured critical thinking abilities. All three studies using validated tools reported high scores in inquiry behaviours at the end of the curriculum and results on critical thinking skills were mixed. One study collected serial data, while remaining studies collected pre-post or post-only data.

Conclusion: IBL has the potential to cultivate a climate of curiosity in health professions, however studies have relied heavily on subjective outcomes. Limited studies reported standardized measures of inquiry behaviours suggest favourable results. Curriculum innovations using IBL could make use of existing validated tools to better understand their impact on students' inquiry-oriented skills.

ODV 8-4

69462

[A competency framework for medical school teachers](#)

Guylene Theriault McGill, **Mina Zeroual** McGill, **Frantz Daniel Lafortune** McGill

Background/Purpose: Many teachers in medicine are part-time and teach only a few hours every year. We were looking for a framework to support development of pedagogical skills for those teachers. We realized that while there are different such frameworks, none has been developed with these non-academic teachers in mind. Our aim was to create a framework to support pedagogical development in different medical education teachers.

Methods: A search strategy was defined with a librarian. We searched ERIC (ProQuest), PubMed, MEDLINE (Ovid) and EMBASE (Ovid) in June 2020. The search was completed by the librarian with McGill University catalogue and Google Scholar. We were seeking to identify key concepts used in previous models to derive our own.

Results: We found 11 framework that fit our definition. None of them were specifically designed for all type of teachers including part-time ones. In comparing the different frameworks, we were able to identify important concepts that we felt should be organized together and would help us create an adapted framework.We devised our framework using the key concepts of knowledge, skills, attitudes, competencies, roles, contexts and ability levels.

Conclusion: The proposed framework is directly applicable to a diverse population of teachers, namely the part-time clinician that teaches in class (big or small groups) or is a preceptor in clinical settings as well as the academic full-time specialist teacher. It can be used as a self-assessment or peer assessment tool to reflect and assist the teacher in its pedagogical journey.

ODV 8-5

69473

[Teacher competency support and remediation policy in a Canadian medical faculty, tackling the elephant in the room.](#)

Ahmed Moussa Université de Montréal, **Véronique Castonguay** Université de Montréal, **Marie-Josée Bédard** Université de Montréal, **Isabelle Chagnon** Université de Montréal

Background/Purpose: Faculties of Medicine aim to provide high quality training to their students by competent teachers, both in terms of professional expertise and pedagogical approaches. Education is also provided in a training environment free of harassment, misconduct and sexual violence. At University of Montreal, we developed a policy to provide teachers, as well as their department chairs, with the necessary resources to facilitate the achievement of this objective. In situations where the quality of teaching or the teaching environment is affected, this policy is intended to support directors who receive reports of unsatisfactory student or teaching evaluations.

Summary of the Innovation: Policy development was initiated after review of rules, regulations and policies of the university and the professional unions. A consultation process was carried out to include all the necessary stakeholders. Three types of reports were identified: 1)problematic educational approach; 2)incivility, psychological harassment and discriminatory behavior or language; 3)sexual misconduct or violence. Problematic educational approaches are managed by the department chair with support from the Center for applied health sciences education. The other types of reports have defined management mechanisms and include the collaboration of the department chair, the Harassment Intervention Office and the general secretary. If the issue remains serious or is recurrent, the Dean's delegated remediation committee is involved.

Conclusion: This new policy provides department chairs with tools to approach teaching quality or environment issues. In addition, problems are identified and approached at an earlier stage. Residents and students are more aware and appreciate the transparent management course of problems that they raise.

ODV 8-6

69519

[Pedagogical program in a decentralized campus to help form teacher's professional identity](#)

Diane Robert Université de Montréal, **Caroline Bell** Université de Montréal, **Julie Morisset** Université de Montréal, **Marie-Helene Girouard** Université de Montréal

Background/Purpose: Since its creation in 2004, clinicans participating in the delivery of the medical curriculum of the campus de l'université de Montréal en Mauricie had to develop their teaching competencies. To meet their needs, develop their competencies and new professional identity as a teacher, a program has been created .

Summary of the Innovation: The program was constructed after a poll. Objectives were identifies and coupled with the curriculum of the teacher-clinician as well as the CanMeds competencies. The program last 5 days over one academic year. The program is offer to family doctors and specialists in the same group of 10 to 12. accompanied by an animator. Different themes are discussed: teaching strategies, motivation, hidden curriculum, clinical reasoning, retroaction, learning positioning, … The teacher's professionnal identity is formed through interaction between participants, readings, works and a reflexive journal . The participants are encouraged to reflect on their own or in group on their values and teaching. It permits them to modify or actualise their teaching skills.

Conclusion: Since the Instauration of the program in 2017, 67 doctors have followed the program. After completion, the participants mention being more at ease with their teaching role, being more motivated to teach and having better skills. They also act as multiplying agents among their peers. An annual teaching day has been created to maintain this teaching community at the regional campus.

OE: April 26, 2022; 08:30 MST

OE 1: Online Learning

Glen 201 - CTCC

OE 1-1

68047

[Structured Medical Education on Instagram: A Novel Resident-as-Teacher Experience](#)

Chaocheng (Harry) Liu University of British Columbia, **Stuti Misty Tanya** Memorial – University of Newfoundland, **Sanjay Sharma** Queen's University

Background/Purpose: Instagram is gaining popularity as an image-based platform for medical education content. To address the need of continued clinical teaching, a total of 17 weekly structured resident-led education sessions on clinical pearls that cover 14 different medical specialties were hosted on Instagram (@medskldotcom). Each week comprised posts on history-taking, examination skills, lab/imaging interpretation, residents' day-in-the-life, and a live lecture.

Methods: Instagram parameters including number of followers and reach (i.e., number of users who viewed posts) were measured pre- and post-

intervention. Eighteen residents (PGY1-6) who organized the posts were surveyed anonymously regarding their prior training on resident-as-teacher and the experience of creating educational Instagram content with a five-point Likert scale.

Results: After the intervention, the number of followers increased by 4-fold from 300 to 1,220 and the average reach per post increased by 5-fold from 96 to 481. 94.4% of residents completed the survey and all respondents received <5 hours of formal training on the topic of resident-as-teacher in their residency programs. 88.2% enjoyed preparing content for the education sessions and agreed the experience enhanced their interests in teaching. 82.4% felt the experience enhanced their teaching skills and agreed that Instagram is an effective platform for medical education.

Conclusion: The structured education sessions in this program not only enhanced residents' interests in medical education but also their teaching skills. Additionally, there is a need for resident-as-teacher training within postgraduate medical education. Resident-as-teacher may serve as an effective way to coalesce high-quality medical education on social media outlets such as Instagram.

OE 1-2

69155

Using Learning-by-concordance online tool to create just-in-time learning during a pandemic

Nicolas Fernandez Université de Montréal, **Haifa Akremi** Université de Montréal, **Khawla Mechichi** Université de Montréal, **Vincent Jobin** Université de Montréal, **Lise Lecours** Entreprise Le-Cours, **Ahmed Moussa** Université de Montréal, **Marie-France Deschênes** Université de Montréal, **Bernard Charlin** Université de Montréal

Background/Purpose: The pandemic spurred Front-line Health Care Providers (FLHCPs) to adapt quickly. We aimed to investigate the added-value of a Learning-by-concordance (LbC) online tool to support fast knowledge transfer from experts to FLHCPs. LbC is ideally suited when there is little published data available as was the case at the start of the pandemic.

Summary of the Innovation: As the pandemic unfolded FLHCPs sent our team questions that experts from multiple fields could answer. We transformed these to LbC format and disseminated them via Qualtrics to a broader group of FLHCPs. Some questions were: 1) should masks be worn all the time? 2) Can kids attend sports camps? 3) Are Covid-19 PCR tests reliable? 4) Are respiratory illness patients at higher risk? Results from FLHCP respondents (n=30) and experts (public health, microbiology and pneumology) (n=7) show that their answers using LbC concorded broadly: both agreed that masks had to be worn in common spaces; experts pointed to prolonged exposure for transmission. Both also agreed that kid's camps were not safe. However, they disagreed with regards to PCR test reliability: participants had heard that PCR tests were not reliable, panelists presented evidence to the contrary. Concerning existing respiratory illnesses, panelists cited recent studies indicating that such patients were not at higher risk.

Conclusion: Questions submitted by FLHCP reflected their uncertainties: expert insight, including up- to-date evidence, served to reassure FLHCPs, illustrating LbCs potential to provide rapid training for emerging situations.

OE 1-3

69223

Educational Effectiveness of E-Learning as a Continuing Professional Development Intervention for Practicing Surgeons: A Systematic Review

Erin Williams Queen's University, **Rosephine Del Fernandes** Queen's University, **Ken Choi** Queen's University, **Laurie Fasola** Queen's University, **Boris Zevin** Queen's University

Background/Purpose: Remote delivery of education became critically important during the COVID-19 pandemic. Electronic learning (E-learning) includes different modalities of educational delivery, most designed for trainees. The effectiveness of E-learning, as a continuing professional development (CPD) intervention, for practicing surgeons in not clear.

Methods: We searched electronic databases (Ovid MEDLINE, Ovid MEDLINE Daily and Epub ahead of print) from 1994 to present. Language limits were set to English and Spanish. We included studies evaluating the educational effectiveness of E-learning CPD interventions for practicing surgeons. We excluded studies involving trainees, and those not evaluating the educational effectiveness. Two independent reviewers assessed studies for relevance, inclusion, and quality of evidence using CASP tools. Two independent reviewers performed data abstraction and categorized educational outcomes using Moore's framework.

Results: We retrieved 1306 studies, excluded 1211 studies on inclusion criteria and/or duplicates, and 95 studies following full text review. We included 15 studies in this review. Eight studies were rated as moderate, five as strong, and two as weak in study quality. Nine studies evaluated surgeons' satisfaction with an e-learning intervention (Moore's Level 2), 9 studies reported a perceived knowledge gain (Level 3a) and 6 studies reported an improvement in surgeons' knowledge of procedural skills (Level 3b). Four studies reported improved competence in an educational setting (Level 4), and two reported a change in practice (Level 5). No studies evaluated Level 6 and 7 outcomes.

Conclusion: E-Learning interventions are effective in delivering remote education to surgeons; however, additional research should target higher level educational outcomes.

OE 1-4

69240

Educating future physicians in the time of COVID: A scoping review of online medical education

Anna MacLeod Dalhousie University, **Paula Cameron** Dalhousie University, **Robin Parker** Dalhousie University, **Victoria Luong** Dalhousie University, **Cora-Lynn Munroe-Lynds** Dalhousie University, **Vinson Li** Dalhousie University, **Brad Wuetherick** University of British Columbia

Background/Purpose: The COVID-19 pandemic, and our rapid move to online educational delivery, has significantly changed Undergraduate Medical Education. Our scoping review was designed to respond to an urgent need to ensure remote UGME is: effective; inclusive; and fosters resilience of teachers and learners.

Methods: We conducted an expedited scoping review of literature published from January 2020 to March 2021. A search strategy involving six databases yielded 3018 studies for screening. Titles and abstracts of included articles were individually screened by seven reviewers. Full texts (n=708) were screened by paired reviewers, with 452 studies chosen for data extraction.

Results: We reviewed 264 research studies that used quantitative (224), qualitative (16), and mixed (13) methods. Only 41 articles identifying a theoretical orientation. Online learning modalities included virtual lectures, learning apps, patient simulations, tutorial groups, serious games, academic panels, and e-learning modules. Most articles focused

on Effectiveness (68%), with fewer examining Resilience (17%) and Inclusion (14%). Our qualitative analysis identified strengths, including flexibility of learning pace (Effectiveness); greater access to virtual clerkships for underserved students (Inclusion); and new attention to psychological safety and wellbeing (Resilience). Challenges identified included fair and accurate online assessment (Effectiveness); inequities in residency selection for historically excluded students (Inclusion); and increased isolation (Resilience).

Conclusion: We recommend broadening the types of research questions being addressed to include rigorous, theoretically informed research in online learning. This requires attention to inclusion and resilience, and topics including Simulation, Virtual Reality, and Telemedicine. We encourage research informed by Critical, Sociomaterial, and Realist Theoretical Perspectives

OE 1-5

69639

[PIVOTMedEd: Helping medical educators pivot curricula online during the covid pandemic](#)

David Keegan University of Calgary, **Ming-Ka Chan** University of Manitoba, **Teresa Chan** McMaster University

Background/Purpose: With the onset of the COVID-19 pandemic, medical educators were faced with the task of suddenly having to unlearn curriculum assumptions and learn how to shift curricula online. PIVOTMedEd (Partners in Virtual and Online Teaching in Medical Education) was developed as a curator of useful online teaching resources.

Summary of the Innovation: A team of three editors crowd-sourced resources related to (1) how to teach online, (2) disciplinary areas (such as surgery, paediatrics), and (3) cross-cutting themes (such as patient safety and leadership development). Resources were reviewed for open accessibility, lack of bias, lack (or minimal) user information gathering, and relevance for learner needs.

Conclusion: PIVOTMedEd launched on March 17, 2020 as an open-access platform using the Google Sites platform. Accessible at pivotmeded.com, the site has had over 4900 unique users from 109 different countries. PIVOTMedEd has curated over 100 online resources from a wide range of fields. Key lessons include the value of a memorable name and URL, the importance of curating, the need for a team, and the value of communications from established individuals and organizations in building awareness. PIVOTMedEd is transitioning to become an official education scholarship platform of AFMC. Technical transition is almost complete with the next phase to focus on developing the strategic plan to achieve this vision.

OE 1-6

68771

["Prez Drillz" for medical students: An online workshop to practice oral case presentation skills and improve through self, peer, and facilitator feedback](#)

Anthony Seto University of Calgary, **Paul Bryan** University of Calgary, **Alexis del Vecchio** Mayo Clinic, **Logan Haynes** University of Calgary, **Nicole Ertl** Alberta Health Services

Background/Purpose: Presenting clinical cases orally is a core skill for medical students, a task that some find intimidating. Oral case presentations may influence preceptors' impression of students, as it highlights learners' cognitive and non-cognitive attributes. Students at our university identified low confidence in presenting oral cases and a desire for more practice. We created a workshop, "Prez Drillz", to address this.

Summary of the Innovation: Before the workshop, students viewed a podcast on oral case presentation structure. 154 second-year students participated in the 2.5-hour workshop, hosted via Zoom videoconferencing, with 1 physician preceptor for 4-5 medical students. During the workshop, students first listened to a 5-minute case audio, outlining patient history and examination findings. Students delivered an oral case presentation, based on information extracted. Self-reflection and feedback from peers and preceptor followed. Students then practiced delivering a second oral case presentation by implementing the feedback received. Students (N=23) completed a retrospective survey on their agreement (1=strongly disagree; 5=strongly agree) with self-efficacy statements regarding presentation skills pre- vs post-workshop (effective frame/context, clear history/physical exam, convincing top differential diagnoses, comprehensive management plan, appropriate confidence, clear/effective communication, organized/structured approach). All ratings of self-efficacy increased with statistical significance (p<0.001) and large effect size; the average self-efficacy rating was 2.50/5 pre-workshop versus 4.32/5 post-workshop. Average workshop rating (N=55) was 4.73/5.

Conclusion: This workshop improved students' self-efficacy in oral case presentation skills. Peer-teaching, repetition, and feedback opportunity aided workshop success. Medical educators can adapt this educational model to help learners practice and elevate oral case presentations.

OE 2: PGME

Glen 202 - CTCC

OE 2-1

69100

[Benefits of an antimicrobial stewardship themed escape room as an educational activity for internal medicine residents](#)

Shaqil Peermohamed University of Saskatchewan, **Chantal Lecuyer** University of Saskatchewan, **Joshua Lawson** University of Saskatchewan, **Marcel D'Eon** University of Saskatchewan

Background/Purpose: In an era of antimicrobial resistance, it is essential to use effective methods of teaching medical trainees about antimicrobial stewardship. Escape rooms have emerged as a motivating and gamified form of simulation-based learning that encourages collaborative learning in medical education.

Summary of the Innovation: We created an antimicrobial stewardship themed escape room, a competitive game where a team of players must discover clues and solve a series of puzzles to escape a "locked" room within an allotted 70 minutes. Puzzles reflected ten core infectious diseases and antimicrobial stewardship objectives derived from Royal College of Physicians and Surgeons of Canada competencies for internal medicine. Six escape room sessions were held with 24 first-year internal medicine residents with each team consisting of three to five players. Following the escape room, we conducted a debriefing with the participants and invited them to complete a retrospective pre-post self-assessment tool to measure changes in knowledge over ten objectives. Five of six teams successfully escaped with an average time of 47 minutes and six seconds. The mean changes in scores for all ten objectives were positive and statistically significant using a Wilcoxon-signed rank test (p<0.005). Residents described the escape room as an engaging experience that stimulated learning and promoted knowledge recall.

Conclusion: Our antimicrobial stewardship themed escape room was well-received by residents and our data suggests perceived learning through this innovative simulation-based learning activity. Antimicrobial stewardship themed escape rooms have the potential to be an effective educational activity that is learner-centered, team-based and can

supplement conventional approaches to teaching antimicrobial stewardship.

OE 2-2

69568

A National Initiative to Ease the Transition from Medical School to Residency: The Learner Education Handover Pilot Project (LEaPP)

Benedicta Antepim University of Calgary, **Leslie Nickell** University of Toronto, **Glen Bandiera** University of Toronto, **Aliya Kassam** University of Calgary

Background/Purpose: The transition from medical school to residency can be a difficult period for many trainees. New residents often report feeling overwhelmed and underprepared for clinical practice. Trainees with existing mental and physical health issues typically experience increasing challenges; for others, the increased stress is a new experience. Learner handovers are increasingly employed to improve the transition from medical school to residency. These handovers, initiated by residency programs, typically focus on knowledge and skills needed for practice for new residents. Rarely do these handover models include a learner centredness approach or address learner wellness needs. This study aimed to address these gaps by implementing and evaluating a unique handover model. This holistic handover includes learner-initiated sharing of information about their academic accommodations needs, professionalism issues, equity, diversity and inclusion concerns, and mental health and social wellbeing needs.

Summary of the Innovation: The handover was piloted at six Canadian post-graduate medical programs in 2019 and 2020. Residents, administrators, and deans at the participating programs were interviewed in both 2019 and 2020 to discuss their experience of the pilot. Administrators were also surveyed on the process of implementing the pilot at their institution.

Conclusion: Learner engagement in the pilot program averaged 12.3% across the six institutions. Participants described the pilot handover as successful in improving awareness of available resources for incoming residents. The handover also helped to facilitate early access and intervention for learners requiring accommodations or other supports. Additional improvements to the handover process are required to address concerns around privacy and communication.

OE 2-3

69045

An Exploration of Faculty and Resident Perspectives on the impact of the COVID-19 Pandemic on Continuity of Education

Lihani Du Plessis University of Alberta, **Ann Lee** University of Alberta, **Shelley Ross** University of Alberta

Background/Purpose: Continuity is a growing area of interest in health professions education, both for its impacts on patient care (continuity of care; CoC), and for its influence on learning (continuity of supervision; CoS). The COVID-19 pandemic offers an opportunity to examine the potential impacts of disruption of both CoC and CoS, as pandemic containment measures included shifts to virtual patient care and virtual supervision of learners. In this study, we interviewed learners and supervisors to explore their perceptions of the impact of COVID-19 on both CoC and CoS.

Methods: Semi-structured qualitative interviews were conducted using a constructivist grounded theory methodology. Participants were recruited from a purposive sample of faculty members and residents within the Department of Family Medicine at the University of Alberta. The interviews were conducted on Zoom, recorded and transcribed. The qualitative data was analyzed iteratively using thematic analysis to identify major themes.

Results: The initial themes that were identified in the analysis indicate that COVID-19 had both positive and negative impacts. For CoC, residents reported that virtual visits removed scheduling barriers and improved residents' ability to maintain CoC with patients. Negative impacts were perceived by residents and preceptors when it came to CoS; specifically, relational continuity between preceptors and residents was harder to establish and maintain. Preceptors also perceived disruptions to their ability to observe residents and share feedback.

Conclusion: This study has the potential to add valuable information about the impact of COVID-19 on continuity. Our findings suggest that the impact of COVID-19 has not been entirely negative.

OE 2-4

69410

What is the nature of uncertainty confronting newly practising doctors?

Richard Conn Queen's University Belfast, **Hannah Gillespie** Queen's University Belfast, **Ciara Lee** University of Otago, **Jason Hancock** University of Exeter, **Florence Findlay White** Queen's University Belfast, **Karen Mattick** University of Exeter, **Tim Dornan** Queen's University Belfast

Background/Purpose: Dealing with complex situations is a fact of life for new doctors, with inability to tolerate resultant feelings of uncertainty associated with poor psychological health.[1] In arguing that mitigating uncertainty requires a deeper understanding of its nature, Tonelli and Upshur classify sources of uncertainty as 'moral', 'metaphysical' and 'epistemic'.[2] Yet empirical evidence suggests these abstract categories may under-emphasise the day-to-day conditions that face practising clinicians.[3] To determine how health professions education can best respond to uncertainty, using the clinically demanding instance of prescribing insulin, this naturalistic research asked 'what is the nature of uncertainty confronting interns?'.

Methods: Reflexive thematic analysis of records of 243 authentic, formative case-based discussions between interns and facilitators (trained senior doctors, specialist nurses, pharmacists and patients), describing self-selected challenging experiences of prescribing insulin in Northern Irish hospitals.

Results: Interns were confronted by: i) 'clinical uncertainty' arising from patient complexity and indeterminate clinical situations; ii) 'social uncertainty', such as when doctors were unsure what to do but unable to bring themselves to ask for help. Interns' attempts to navigate uncertain situations were strongly influenced by emotions, with 'fear of getting it wrong' powerfully (often negatively) shaping decision making.

Conclusion: Rather than individual lack of knowledge or ethics, interns' uncertainty was a consequence of interwoven clinical and social factors that meant there was rarely a 'right answer'. To benefit doctors' wellbeing, education should look beyond individualistic approaches, towards social pedagogies that collectively enable health professionals to navigate complex clinical situations.

OE 2-5

69539

The Impact of 'Care of the Elderly' Certificates of Added Competence on Family Physician Practice: Results from a Pan-Canadian Multiple Case Study

Rebecca Correia McMaster University, **Lawrence Grierson** McMaster University, **Janelle Panday** McMaster University, **Henry Siu** McMaster University, **Alison Baker** McMaster University, **Ilana Allice** McMaster University, **Meredith Vanstone** McMaster University

Background/Purpose: Family physicians serve an important role in the care of older adults, and have variable levels of training and comfort navigating this complex patient population. The Care of the Elderly (COE) Certificate of Added Competence offered by The College of Family Physicians of Canada recognizes family physicians with particular expertise working with older adults. We explored how COE training and certification impacts primary care delivery to older patients, including factors that impact group practice.

Methods: We conducted a secondary analysis of multiple case study data to explore similarities and differences within and across cases. We defined cases as a practice or collective of family physicians working within a defined group of patients in an interconnected community. We analyzed semi-structured interview transcripts (n=48) from six practice groups of family physicians across Canada. We used a conventional (unconstrained, inductive) content analysis approach to develop a conceptual framework.

Results: We identified similarities and differences in how COE family physicians function within their group practice and the broader healthcare system. In some cases, COE certifications increased patients' access to geriatric resources by reducing travel and wait times. Some physicians observed minimal changes in their role or group practice after earning the COE designation, including continuing to largely function as a generalist. While family physicians tended to highly value their COE CAC, this designation was differentially recognized by others.

Conclusion: Our findings highlight the impacts and limitations of COE training and certification, which may be informative to medical trainees and family physicians considering this opportunity.

OE 2-6

69546

Comparing the core competencies of geriatric-focused medical providers in Canada: A qualitative document analysis

Rebecca Correia McMaster University, **Amina Jabbar** McMaster University, **Henry Siu** McMaster University, **Sophie Hogeveen** McMaster University, **Darly Dash** McMaster University, **Meredith Vanstone** McMaster University

Background/Purpose: Given longstanding deficits of medical expertise to care for older adults, ensuring equitable access to geriatric-focused medical care is an ongoing challenge. In Canada, three medical specialties contribute expertise in geriatric-focused care: family physicians with certification in Care of the Elderly (COE), geriatricians, and geriatric psychiatrists. In this work, we compared the competencies expected of these physicians to identify areas of overlap and points of distinction.

Methods: In this qualitative study, we used a comparative approach to document analysis. We identified publicly available documentation of the competencies required for certification from the College of Family Physicians of Canada and the Royal College of Physicians and Surgeons of Canada. Using a directed content analysis approach, we compared competencies across provider types and identified themes among competencies within each CanMEDS Role according to the CanMEDS Framework.

Results: We identified substantial overlaps in COE family physicians' and geriatricians' expected medical expertise. Some distinctions may result from different priorities for which competencies were made explicit by the regulatory colleges. The expected competencies for geriatric psychiatrists were largely distinct, and specified the degree of expertise required for each competency. A lack of competencies related to scholarship, advocacy, leadership, and professionalism was apparent for COE family physicians.

Conclusion: Our findings may stimulate dialogue about opportunities for physicians to collaborate in the care of a shared patient population. Ultimately, this work may encourage efforts to develop robust delineations of scopes of practice to facilitate more equitable medical care for older adults and better collaboration between providers.

OE 3: IPE / Teams

Glen 203 - CTCC

OE 3-1

69466

"Maybe I'm not that approachable:" Using simulation to disrupt and explore problematic team hierarchy behaviours

Rachael Pack Western University, **Trevor Hines Duncliffe** Western University, **Lauren Columbus** Western University, **Priyanka Singh** Western University, **Maddison Bibby** Western University, **Harrison Banner** Western University, **Sayra Cristancho** Western University, **Taryn Taylor** Western University

Background/Purpose: Simulation research that seeks to solve the problem of silence within interprofessional teams has focused exclusively on teaching subordinate team members to be brave and speak up, despite great interpersonal cost. Yet, these simulation-based interventions overlook the influence and responsibility of the team leader. This study moves beyond existing "speaking up" dogma to explore whether simulation can support faculty in learning how to listen when team members are unable or unwilling to risk speaking up explicitly.

Methods: Obstetricians (OB) at one academic centre participated in an interprofessional simulation as a partial confederate. Five challenge moments were scripted for the OB involving deliberate clinical judgement errors or professionalism infractions. Other participants were unaware of the OB confederate role. Ten iterations were completed with 30 participants (10-OB, 9-residents, 1- Family Medicine OB, 4-midwives, 6-nurses). 8 faculty members completed a subsequent semi-structured interview. Scenarios were videotaped; debriefs and interviews were audio-recorded and transcribed verbatim.

Results: Across the 10 scenarios, few direct challenges were made by subordinates. Faculty members described the experience as "eye-opening" and questioned how often they were missing subtle cues or challenges from team members outside the simulated setting. Faculty members ultimately demonstrated an awareness that their verbal and non-verbal communication patterns shape team members' perceptions of their approachability before and during critical incidents.

Conclusion: Through a carefully designed, unconventional, simulation exercise, faculty gained a new appreciation that they create the conditions for speaking up to occur before a critical incident through their verbal and non-verbal communication.

OE 3-2

69072

Following the breadcrumbs: Exploring trace-based communication in healthcare teams and its implications for training

Sayra Cristancho Western University, **Emily Field** Western University

Background/Purpose: Communication in healthcare prioritizes verbal and written forms, while dismissing the non-verbal. Consequently, we know little about whether particular forms of non-verbal communication might actually be beneficial for healthcare teams. In the biological literature, trace-based communication refers to use of objects or "traces" to drive the behaviour of others. In literature outside healthcare, trace-based communication is regarded as critical for teams to coordinate work and collectively adapt. This study explores the use of traces in healthcare team communication.

Methods: Following Constructivist Grounded Theory and theoretical sampling, 25 clinicians from various specialties were interviewed about their experiences employing trace-based communication Data was analyzed using the sensitizing concept of "traces" and constant comparison technique.

Results: This study identified unique elements of trace-based communication in the context of healthcare including: focused intentionality, successful versus failed traces and the contextually bounded nature of traces' response. While participants initially felt ambivalent about using traces in their daily teamwork, they provided many examples, such as leaving specific instruments at the bedside to imply next steps in care or having patients wear specifically coloured armbands to signal care requirements. Through these examples, participants revealed the multifaceted nature of the purposes of trace-based communication, including promoting efficiency, preventing mistakes and saving face.

Conclusion: This study demonstrated trace-based communication is widespread in healthcare. As these findings suggest, non-verbal communication is not always problematic. It can be used in purposeful ways and therefore deserves closer scrutiny to decide how to capitalize on its benefits to enhance teamwork training.

OE 3-3

69289

When do residents say "I don't know"?: Expressions of uncertainty in multiprofessional teams

Jamila Skinner Western University, **Taryn Taylor** Western University, **Harrison Banner** Western University, **Sayra Cristancho** Western University, **Sarah Blissett** Western University

Background/Purpose: Residents must learn to grapple with clinical uncertainty. Most training efforts are focused on reducing uncertainty with little insight into how residents express uncertainty. For instance, how do they tailor their expressions of uncertainty to the topic (diagnosis vs. management-related) and to other people present? Identifying how residents express uncertainty could inform strategies to develop team communication in a manner that promotes patient safety. We explored how residents expressed uncertainty in the context of multiprofessional teams.

Methods: Thirteen obstetrics (OB) and cardiology residents participated in two high-fidelity, multiprofessional maternal cardiac disease simulation scenarios featuring elements of reducible and irreducible uncertainty. Video recordings were independently analyzed for expressions of uncertainty, where "indirect expressions" were defined as evasive responses to specific questions. Proportions of indirect and direct expressions were compared using Chi-square tests.

Results: There were 122 indirect and 28 direct expressions of uncertainty. The words "concern" or "worry" were used in 24% of indirect expressions. While diagnostic uncertainty was most frequently expressed indirectly (67%), management uncertainty was most frequently expressed directly (58%) (p=.016). Uncertainty was expressed similarly by OB and cardiology trainees (p=.438). There were no significant differences in how uncertainty was expressed if an attending was present (p=.531), if the conversation was with an attending or a resident (p=.303), or if the conversation was with a physician from the other specialty (p=.595).

Conclusion: Residents expressed diagnosis and management-related uncertainty differently. Residents and attendings need to be attuned to the subtle, indirect methods of expressing uncertainty to optimize patient safety.

OE 3-4

69671

Sharing Experiential Knowledge to Enhance Collaborative Practice in Interprofessional Care

Nicolas Fernandez Université de Montréal, **Nicolas Gulino** Université de Montréal

Background/Purpose: Experiential learning is an important cognitive resource for continuous professional development (Alves et al., 2020; Kolb, 2014). It allows professionals to develop their skills not only "on", but also "from" the job, as experiences unique to each work context build on each other. How is experiential knowledge mobilized and learned among an inter-professional team engaged in a shared activity of "care"? In geriatric "care", the sharing of experiential knowledge among professionals is commonplace, yet not fully understood pedagogically.

Methods: We filmed 2 Inter-Departmental Team meetings at a nursing home with residents and a healthcare team consisting of an MD, nurse, and physical therapist. We selected 5 scenes for analysis in an "Activity clinic" (Clot et al., 2000, 2001), an interviewing approach enabling professionals to observe, reflect on, and discuss their work. Interviews were conducted individually, in dyads, and with the whole team.

Results: Using discourse analysis we "dislodged" examples of experiential knowledge at work among the team. We documented points of articulation, agreement, and disagreement around themes central to their collective work as caregivers, including "level of care", "nutrition", "mobility", etc. We revealed substantial learning, unlearning and relearning of experiential knowledge as practitioners reflected on, mobilized, and applied their knowledge in their work.

Conclusion: Our research highlights instances of experiential learning mobilized in a context of inter-professional care. Our method allows team's work activity to be openly discussed and co-analyzed by members of the team itself, further generating new avenues for learning that can be reinvested in their practice.

OE 3-5

69600

Dialogue for change: Advancing the teaching and practice of critical reflection in health professions education

Victoria Boyd University of Toronto, **Nikki Woods** University of Toronto, **Arno Kumagai** University of Toronto, **Anne Kawamura** University of Toronto, **Angela Orsino** University of Toronto, **Stella Ng** University of Toronto

Background/Purpose: Critically reflective practice supports health professionals in addressing inequities in their day-to-day work. Dialogue has been proposed as a paradigmatically aligned and promising approach

to fostering critical reflection. However, the field requires research evidence that links dialogic teaching to critically reflective practice. This experimental study aimed to address this gap by testing whether a theory-informed dialogic teaching approach impacts learners' practice. The practice context was writing letters for children with disabilities who require special education support.

Methods: In interprofessional small groups, 92 medical, occupational therapy, and speech-language pathology students were randomized into a reflective discussion or a critically reflective dialogue. All participants were then randomly assigned a clinical report and instructed to write a hypothetical letter to the child's school. Blinded to condition assignment, letters were coded for what was written and how it was written (critically reflective, or not). Hierarchical regression models were constructed to estimate the probability of sentences and letters being critically reflective.

Results: While what was written in the letters was similar across learning conditions, how the letters were written differed. Learners in the dialogue condition had a significantly higher probability of writing critically reflective letters, measured at the levels of the individual sentence (28% versus 12%) and the letter as a whole (26% versus 4%).

Conclusion: Our results demonstrate the educational potential of dialogue in fostering critically reflective practice and supporting meaningful interprofessional education. The study contributes to a growing body of knowledge on how to educate health professionals to leverage their practice to address inequities in healthcare.

OE 3-6

69619

An Interprofessional Educational Mentorship Model for Improving Maternal and Child Practice in Rwanda: Nurses' and Midwives' Experiences.

Yvonne Kasine Western University, **Dr. Yolanda Babenko-Mould** Western University

Background/Purpose: To assist in the reduction of maternal and child morbidity and mortality in Rwanda, a four-year health development project between Rwandan institutions and Western University in Canada was funded by Global Affairs Canada and implemented between 2016 and 2020. One pillar area of the project, titled Training, Support, and Access Model (TSAM) for maternal, newborn, and child health (MNCH) in Rwanda, involved an interprofessional healthcare provider mentorship model situated in pediatric acute care practice settings in Rwanda. Mentors and mentees included physicians, nurses, and midwives. The purpose of this particular interpretive phenomenological study was to explore nurses' and midwives' lived experience of participating as mentees in the TSAM mentorship model in Rwanda.

Methods: Data was collected through individual interviews using a semi-structured interview guide. Interviews were audio-recorded, transcribed verbatim, and translated from Kinyarwanda to English, as required. The thematic data analysis in this study was conducted based on van Manen's (1997) guidelines.

Results: The key themes included: 1) The Process of Mentorship from Mentees' Perspectives 2) Developing New and Honing Existing Professional Competencies 3) Perceived Improved Patient Care Outcomes 4) Overcoming Challenges Associated with the Mentorship Experience

Conclusion: Policy, education, and health system recommendations regarding mentorship programs for healthcare providers aimed at improving maternal and child care in Rwanda and similar resource-limited settings were developed to put forward based on the findings from this study.

OE 4: Black health & wellness / student wellness

Glen 204 - CTCC

OE 4-1

69156

"If I do nothing, nothing will happen; if I do something, I'm going to end up doing everything": Examining the institutional responses of Canadian medical schools to the calls to action to address anti-Black racism in 2020

Amira Kalifa University of Calgary, **Ariet Okuori** University of Calgary, **Orphelia Kamdem** University of Calgary, **Doyin Abatan** University of Calgary, **Sammah Yahya** McMaster University, **Allison Brown** University of Calgary

Background/Purpose: The murder of George Floyd in Spring 2020 sparked an outcry of public protests against police brutality and anti-Black racism. Organizations and institutions, including medical schools, swiftly released public statements condemning racism and, in some instances, articulating a commitment to racial justice. A spotlight remains on the actions institutions have since taken to dismantle archaic power structures. A specific understanding on how medical schools in Canada have responded following their public statements is lacking.

Methods: Using a qualitative instrumental case study guided by critical race theory, we explored how medical schools in Canada responded to calls to action to address anti-Black racism in medicine. We conducted individual, semi-structured interviews with Black medical students and medical school Deans (or a faculty delegate) and analyzed transcribed interview data using inductive and deductive analytic methods.

Results: 8 medical students and 11 faculty leaders were interviewed between October 5th, 2020-Janurary 16th, 2021. We found diverging perspectives among students and faculty regarding the early engagement of Black medical students, overall effectiveness of the institutional response, and barriers to implementing change. Importantly, medical students were heavily relied on to drive institutional changes due to an absence of Black faculty in the school, especially in leadership.

Conclusion: The lack of racial diversity amongst faculty and leadership at Canadian medical schools resulted in a dependence on Black medical students to direct institutional anti-racism responses. Institutions appear to have inadvertently burdened students to address systemic issues that medical schools themselves have historically perpetuated and upheld.

OE 4-2

68852

Systems Thinking Approach to Understand Mental Model of Public Humiliation in Medical Education

Setthanan Jarukasemkit Faculty of Medicine, Ramathibodi Hospital, Mahidol University, **Karen M Tam** Faculty of Medicine, Ramathibodi Hospital, Mahidol University, **Phanuwich Kaewkamjonchai** Faculty of Medicine, Ramathibodi Hospital, Mahidol University

Background/Purpose: Mistreatment in medical school is a wicked or complex problem demonstrating inter- relatedness and dynamicity of factors that affect students. Many studies have outlined the causes, perceptions and negative consequences of mistreatment, however, a comprehensive mental model of public humiliation, the most common type of mistreatment, is still incomplete. This study aims to provide insight into the reasons why public humiliation in medical school continues to be a problem despite existing for decades, and to propose a shift in paradigm that will improve these incidents.

Methods: A systems thinking approach is used to conceptualize related components of public humiliation and student behavior. Through

extensive literature review and problem structuring, we synthesize a mental model of humiliation displayed by a Causal Loop Diagram (CLD).

Results: From findings described in the CLD, students' performance is recognized as a key contributing factor leading to public humiliation. The mental model proposes two major systems underlying the consequences, the balancing loop illustrating the "No Pain, No Gain" mindset and the reinforcing loops of "Stress Overload" and "The Delayed Side Effect".

Conclusion: Systems thinking provides a comprehensive mental model of public humiliation to raise awareness among medical educators about the negative consequences of this kind of mistreatment. The paradigm shift to overcome the 'fix that fail' archetype is recommended to lessen abuse in medical school by referring to 3C's: Continuity of student supervision, Constructive questioning and Combining adult learning theory to medical curriculum.

OE 4-3

69350

Learner Neglect: Behaviour descriptions and prevalence's across learning contexts

Kiran Veerapen University of British Columbia, **Katherine Wisener** University of British Columbia, **Dajana Labas** University of British Columbia, **Kevin Eva** University of British Columbia

Background/Purpose: "Learner neglect" describes teacher behaviours that do not always fit squarely within the definition of mistreatment, but are still detrimental to learners. There is a lack of empirical research identifying specific behaviours that constitute learner neglect; nor do we know much about their prevalence across learning contexts. We sought to better elucidate what aspects of neglect lead students to claims of 'ineffective teaching' in an effort to identify strategies to improve learning environments.

Methods: Student assessments of teachers indicating ineffective teaching and affiliated narrative comments were examined across 2018-19 and 2019-20 at UBC's MD Undergraduate Program. An inductive procedure resulted in a codebook with labels, operational definitions, and examples for each type of ineffective behaviour that emerged in small-group, large-group, and clinical contexts.

Results: Overall, ineffective teaching was identified in just 1% of teaching encounters. Narrative descriptions generated 10 types of problematic behaviour that were sorted into three superordinate themes: Interactions with students, educational support and process issues. With considerable overlap, the prevalence and particulars were context-specific (i.e., varied dependent on learning environment).

Conclusion: While uncommon, ratings of ineffective teaching emerged across all learning environments and stages of training. The characteristics of perceived ineffective teaching were predominantly determined by the nature of the teacher-learner relationship in each learning environment and inform role-specific faculty development to support teachers, learners and inclusive learning.

OE 4-4

69495

The contribution of Canadian Undergraduate Medical Education dress codes to systemic discrimination: A critical policy analysis

Santanna Hernandez University of Calgary, **Shannon Ruzycki** University of Calgary, **Tito Daodu** University of Calgary, **Kristie Lithgrow** University of Calgary, **Manpreet Dhillon** University of Calgary

Background/Purpose: Critical review of institutional policies is necessary to identify and eliminate structural discrimination in medical schools.

Dress code policies are well known to facilitate discrimination in other settings. In this critical policy analysis, the authors used feminist critical policy analysis (FCPA) and critical race feminism (CRF) as guiding frameworks to understand how Canadian undergraduate medical school dress code policies may contribute to discrimination and a hostile culture for marginalized groups.

Summary of the Innovation: Dress code policies were obtained from Canadian medical schools. Deductive and inductive content analysis of dress codes was performed by a racially diverse study team. Framework analysis was performed to organize dress code restrictions, using FCPA and CRF to understand how restrictions may contribute to discrimination by marginalized groups. Fourteen dress code policies were analyzed. Overall, there were five feminine coded restrictions for every one masculine coded restriction (n=77/213 and n=16/213, respectively). Some policies specifically prohibited feminine coded items (e.g., perfumes, bracelets) while allowing masculine coded items (e.g., cologne, watches). A discourse of "professionalism" based on patient preferences prioritized Eurocentric patriarchal norms for appearance, potentially penalizing racially and culturally diverse students. Most policies did not include a policy for appeals or accommodations.

Conclusion: Canadian undergraduate medical school dress code policies overregulate women and gender, racially and culturally diverse students by explicitly and implicitly enforcing white patriarchal social norms. Administrators should apply best practices to these policies to avoid discrimination and a hostile culture to marginalized groups.

OE 4-5

69370

Support emergency medicine undergraduate students during the COVID-19 Pandemic: Building a near-peer support network

K. Jean Chen, University of Ottawa**, Steven Alchi,** University of Ottawa, **Sacha Weill,** University of Ottawa**, Rhiannan Pinnell,** University of Ottawa, **Andréa Brabant,** University of Ottawa, **Nick Prudhomme,** University of Ottawa

Background/Purpose: Covid-19 underscored a renewed urgency in building a student support system. The post-pandemic climate made student-led identification of mentors difficult, worsened by the pause of pre-clerkship observerships. Application of engagement models through implementation of a near-peer support network provided a solution to the challenges inherent to educational support in the post-pandemic era.

Summary of the Innovation: A near-peer mentorship program was implemented in Emergency Medicine, University of Ottawa, to support student-mentees and emergency resident-mentors. This model drew on "flexible mentoring", whereby intrinsically motivated emergency residents mentor medical students. The pandemic provided a contextual driver: by interacting with resident-mentors and integration into this intimate network, students were provided with near-peer role models and empowered as legitimate members in our community of practice. A steering committee guided program development to respond to on-the-ground operation and to liaise with departmental leadership, which included PGME program directors and departmental chief. In line with self-determination theory, a self-matching process was chosen, where resident-mentors posted their area of interest, learning style, age-group, and academic background on SharePoint®. This was disseminated via the emergency medicine interest group to allow mentees to identify potential mentors and be the driver of their career. Preliminary program evaluation demonstrated improved self-perceived social connection.

Conclusion: While there is a role for wellness initiatives that target individual learners, more salient is the effect of interventions that target

engagement on a systemic level. An enhanced near-peer support network based on engagement models and social interdependence theory provided a close-knit community of support.

OE 4-6

69488

[Measuring wellness: a scoping review of metrics and studies measuring medical student wellness longitudinally](#)

Henry Li University of Alberta, **Tushar Upreti** University of Manitoba, **Victor Do** University of Toronto, **Erica Dance** University of Alberta, **Melanie Lewis** University of Alberta, **Cheryl Goldstein** University of Alberta, **Ryan Jacobson** University of Alberta, **Aviva Goldberg** University of Manitoba

Background/Purpose: Numerous studies have demonstrated high rates of burnout, depression, anxiety, and psychological distress in medical students. Our study sought to report the metrics and methods used to measure medical student wellbeing in longitudinal studies and further characterize the literature.

Methods: Arksey and O'Malley's framework and Levac et al's recommendations for scoping reviews were followed. Five electronic databases were searched for primary research studies that employed survey-based metrics in a medical student population at two or more timepoints. Systematic reviews and meta-analysis' reference lists were hand-searched for relevant articles. Screening and data extraction were done independently by two reviewers with conflicts resolved via consensus.

Results: Of the 6745 studies screened, 221 met the inclusion criteria. We examined patterns in study design, noting significant heterogeneity and gaps relating to population size, inclusion of preclinical versus clinical students, timepoints measured, and duration of follow-up. 150 different metrics that measured diverse aspects of wellness were captured. There was a wide range in frequency of use between metrics (range 1-47). We also found significant region-specific and temporal differences in metric use.

Conclusion: There exist numerous metrics that have been used to measure medical student wellness longitudinally--the breadth of metrics measuring each component of wellness can be used to inform future study design in medical schools. Although there are many studies that have explored learner wellness over time, particular gaps in study design and metric usage suggest areas in which further research with robust methodology is needed to strengthen our understanding of the wellbeing of medical students.

OEV 5: UGME

Virtual 1

OEV 5-1

68951

[The New Mentee: Exploring Gen Z Women Medical Students' Mentorship Needs, Values, and Experiences](#)

Calandra Li University of Toronto, **Paula Veinot** Independent Research Consultant, **Maria Mylopoulos** University of Toronto, **Fok-Han Leung** University of Toronto, **Marcus Law** University of Toronto

Background/Purpose: The incoming Canadian cohort of medical students is comprised mainly of individuals from Generation Z (Gen Z; born between 1997-2012), with greater than 50% of applicants identifying as female. This study explored the unique needs, values, and experiences of Gen Z women medical students and the impact of these factors on mentorship expectations.

Methods: Semi-structured interviews were conducted (February-May 2021) with 15 Gen Z women medical students from 14 English-speaking Canadian medical schools. An iterative constant comparative team approach was utilized to explore emergent themes. Verbatim transcripts were coded into categories, then grouped into themes using descriptive analysis.

Results: These socially aware learners described how current society had afforded them more opportunities for expression and empowerment, which gave them a sense of feeling advantaged over older generations. However, participants paradoxically expressed feelings of powerlessness (e.g., hesitation to reach out to busy mentors). Participants commented on tensions they experienced when interacting with physician mentors from older generations, especially during conversations on social justice issues. They also highlighted instances of biased mentorship specific to their gender. Participants emphasized a desire for inclusive mentorship that considered the mentee's identity and intersectionality through factors such as age, gender, socioeconomic status, ethnicity, and other lived experiences.

Conclusion: The growing number of women learners in Canadian medical schools necessitates a re-evaluation of mentorship delivery to account for the diverse needs and novel experiences of Gen Z women students. Mentors of such learners must adapt by integrating Gen Z ideals to overcome new and longstanding mentorship challenges

OEV 5-2

69538

[The AFMC's UGME Entrustable Professional Activities: where are specific EPAs being assessed in clerkship?](#)

Michelle Gibson Queen's University, **Eleni Katsoulas** Queen's University

Background/Purpose: After conducting a gap analysis, our institution determined that there were opportunities to assess the following AFMC UGME EPAs in clerkship: providing/receiving handover (EPA7), recognizing patients needing urgent/emergent care (EPA8), communicating in difficult settings (EPA9), and educating patients (EPA12).

Methods: Assessment tools were developed, and all 105 clerks were required to collect at least 6 workplace-based assessments for these 4 EPAs over the course of their 8 core rotations, with at least one assessment collected for each EPA. An analysis of where the EPAs were triggered and the level of supervision noted was completed.

Results: EPAs 7, 8, 9 and 12 were all assessed in all core rotations, with patient education being most frequent assessed (143 instances), followed by giving/receiving handover (129), communicating in difficult situation (105), and recognizing the need for urgent/emergent care (90). Medicine was the rotation in which the most assessments were obtained in handover, recognizing urgent/emergent care, and communicating in difficult situations. Patient education was most frequently assessed in family medicine. For all 4 EPAs, the most common level of supervision selected was "indirect supervision, key components double-checked', noted in 60-66.7% of assessments depending on the EPA.

Conclusion: Obtaining assessments for EPAs 7, 8, 9 and 12 is possible in all clerkship rotations in our institution. Our next steps involve: 1) determining if there is any overall progression of these skills; 2) determining minimum threshold levels of supervision for these EPAs; and 3) the number of assessments required to begin to assess competence at the UGME level.

OEV 5-3

69096

[Development of a novel evidence-based medicine (EBM) primer for undergraduate medical students in a regional campus](#)

Rahim valani University of Toronto, **Suneel Upadhye** McMaster University, **Ekta Khemani** McMaster University, **Ashley Wang** McMaster University, **Mario Hann** McMaster University, **Seddiq Weera** McMaster University, **Larry Chambers** McMaster University

Background/Purpose: Medical schools across Canada are faced with the challenge of what to include in the curriculum, and there is a lack of EBM teaching. Currently, formal EBM teaching in the McMaster undergraduate medical curriculum is limited to three hours of live teaching and additional pre-recorded lectures. Given the growing importance of EBM knowledge and skills, EBM education time should be increased in the curriculum through innovative approaches without compromising other subjects.

Summary of the Innovation: An environmental scan was completed to understand what students understood about EBM, the resources they used, preferred learning formats, and to identify any gaps in knowledge. The results of this survey guided the development of an EBM primer course of study as a proof of concept curriculum in the first year. Using the evaluations and feedback from the first iteration, the primer now includes 11 sessions that are mapped out to the curriculum to apply concepts that are concordant with the formal curriculum.

Conclusion: Following development of the initiative, our presentation will report on the first iteration of the primer and the updates proposed from feedback received. Approaches to evaluation include the use of standardized measures of EBM knowledge acquisition and an assessment of whether learners strengthen their comfort and familiarity with EBM. The potential impact of this initiative is to help aid in the clinical decision-making skills of the learners. In addition, the learning resources will create a legacy educational resource available to both medical students and community physicians and inform other regional campuses about this approach to EBM.

OEV 5-4

69667

[Teaching Antibiotics through Visual Media and Storytelling](#)

Kevin Zhang University of British Columbia, **Melissa Kong** University of British Columbia, **Glenn Regehr** University of British Columbia, **Mary Kestler** University of British Columbia

Background/Purpose: Learning antibiotics, their spectrum of activity, clinical uses and toxicities is daunting for many medical students due to the volume of information and memorization involved. Medical education must also address growing antimicrobial resistance and principles of antimicrobial stewardship to future prescribers. Studies show that people are more likely to remember information presented in narrative form. We created a live-action drama video series with characters playing the roles of bacteria and antibiotics to engage students and enhance learning.

Summary of the Innovation: We created a three-episode dramatic mini-series entitled "Antibiotics: The Drama" (https://youtube.com/playlist?list=PLAUZ1g9D-bpBRRnss5GWkcWwy9_HNTuCd) to spotlight common bacterial pathogens and frequently used antibiotics. The over-arching storyline is the eternal war between antibiotics and bacteria, focusing on the rise of antimicrobial resistance and the beneficial role of the human microbiome. The target audience is pre-clerkship medical students. To establish a baseline, we surveyed students not exposed to the mini-series about anxiety related to learning antibiotics and tested antibiotic knowledge. At baseline, 83% of first-year students reported feeling anxious after their

first antibiotic lectures, and second-year students scored an average of 45% on the knowledge retention quiz 16 months after their first antibiotics lectures. We will repeat these assessments in students exposed to the mini-series to determine effectiveness of this novel teaching tool at reducing anxiety and enhancing knowledge retention, as an adjunct to traditional didactic lectures.

Conclusion: Digital storytelling as an adjunct to didactic teaching can be an effective way to engage medical students in learning, reduce the stress of memorizing information and improve knowledge retention.

OEV 5-5

69403

[DELTA Healthcare Conference: Building a national peer-to-peer community of practice for clinical innovation in Canada](#)

Yousuf Ahmed University of Toronto, **Josh Herman** University of Toronto, **Joseph Ferenbok** University of Toronto

Background/Purpose: Globally healthcare delivery is constrained by increasing costs, aging populations, and shrinking tax-bases. Innovation is touted as the key to enhancing quality of healthcare delivery. Physicians are particularly well-placed to recognize opportunities for innovation, but are not currently provided with tools for systematically and efficiently identifying, developing, and translating their experiences into innovation. This training gap constitutes a documented and growing 'valley of death' between collaborative research and its implementation for improved patient outcomes.

Summary of the Innovation: The DELTA conference was founded by a team of six medical students as a two-day platform to address gaps in physician healthcare innovation training. Through peer-to-peer mentorship and discussion, the conference introduced medical trainees to foundational concepts associated with leadership in translation, and entrepreneurship in healthcare innovation. The conference was delivered virtually on the Hopin platform and was attended by 220 participants from five Canadian provinces including medical students, community advocates, healthcare entrepreneurs, and physicians. The event highlighted design thinking, entrepreneurship, leadership, technology, and artificial intelligence, and included 1) a focus on physician-future physician mentorship, 2) a diverse group of physician and innovation experts, 3) interactive opportunities for knowledge sharing and modelling best practices, and 4) community building.

Conclusion: Of respondents surveyed (n=32), 56.3% (n=18) had no prior exposure to clinical innovation, and 96.9% (n=31) stated they would attend future innovation-related events. This study summarizes key learnings, future directions, and the implications of physician-focused translational and entrepreneurial training for the future of global health innovation.

OEV 5-6

69545

[Changing the paradigm: Increasing Student Autonomy in Clerkship Examinations during the Pandemic](#)

Andrea Guerin Queen's University, **Eleni Katsoulas** Queen's University, **Amber Hastings-Truelove** Queen's University, **Michelle Gibson** Queen's University

Background/Purpose: Prior to the pandemic, clerks at Queen's University had to complete discipline-specific summative examinations at the end of most clerkship blocks. Due to the pandemic and the need for shorter rotations, the decision was made to allow students to determine their own schedule for these clerkship summative examinations.

Methods: Students determined their examination schedule based on predetermined examination dates. They were required to complete all examinations by the end of their core rotations. All examinations were written with remote-proctoring. We compared results from students at two points: pre-pandemic 6-week rotations (October 2019- March 2020, class of 2021, in-person proctoring), and post pandemic 4-week rotations (June 2020-October 2021, class of 2022, remote-proctoring), for 3 clerkship examinations (Pediatrics, Psychiatry and Obs/Gyn).

Results: Welch's t-tests were conducted to compare the means of the two groups and it was determined that the difference in means was not statistically significant: (Pediatrics: N=99 (pre-pandemic), N=171 (post-pandemic), p=.906; Psychiatry: N=99 (pre-pandemic), N=166 (post-pandemic), p=.905; & Obstetrics: N=98 (pre-pandemic), N=162 (post-pandemic), p=.216). Psychiatry had one failure pre-pandemic and Obstetrics had two failures post-pandemic, while Pediatrics had none. First exam attempts/scores were used for these calculations.

Conclusion: Students were able to determine their own examination schedule based on their own preferences, and this had no impact on exam performance compared to a centrally determined schedule. This demonstrates that allowing students freedom to formulate their own study strategies and learning plan is a viable alternative to end of block clerkship examinations for assessing discipline specific knowledge.

OEV 6: PGME

Virtual 2

OEV 6-1

69409

A Resident Equity, Diversity, and Inclusion Committee: Transforming Consciousness and Structures

Ashna Asim University of Toronto, **Justin Lam** University of Toronto, **Ryan Giroux** University of Toronto, **Sabrina Lue Tam** University of Toronto, **Yamna Ali** University of Toronto, **Bonnie Cheung** University of Toronto, **Adelle Atkinson** University of Toronto

Background/Purpose: Equity, diversity, and inclusion (EDI) issues are prevalent in healthcare and medical education systems. Minority groups within these systems have historically experienced and continue to experience individual and systemic discrimination, marginalization, and exclusion. Excellence within medical education is contingent on diverse residents and faculty who feel empowered to contribute meaningfully to their work and learning environments. Therefore, we must look towards models for change which must rely on transforming individual consciousness and working to transform overarching systems and structures.

Summary of the Innovation: The University of Toronto Paediatric Residency Training Program has established a Resident EDI Committee. The committee aims to identify and address EDI issues in a meaningful and actionable manner. The committee also aims to integrate anti-racism and anti-oppression principles within residency education. We share our experiences establishing this committee and highlight the anti-racist and anti-oppressive guiding principles which we believe are key features of any resident EDI committee. These principles guide 1) our committee goals, 2) its reporting, accountability, and authority within the program, 3) member selection process to ensure representation of traditionally marginalized voices, and 4) a consensus-based decision-making process

Conclusion: We will share the group processes used to identify shared goals and the results of our work thus far, including EDI integration within the resident curriculum and supporting residents experiencing racism. Furthermore, we share our planned work to review the resident selection process, recognize EDI work in awards, and reduce barriers to learners

celebrating non-Eurocentric holidays. Our goal is to provide a blueprint for others to establish similar committees.

OEV 6-2

69184

Scut or Education? Transforming the burden of indirect care tasks into fitness training for a sustainable career

Danielle O'Toole McMaster University, **Meredith Vanstone** McMaster University, **Marina Sadik** McMaster University, **Gabrielle Inglis** McMaster University, **Justin Weresch** McMaster University

Background/Purpose: Indirect patient care activities (IPCA) are clinical tasks that do not require direct interaction between the physician and patient, such as documentation and reviewing investigations. The increase in IPCAs have been linked to corresponding increases in physician burnout and job dissatisfaction, and it is not known how best to prepare family medicine trainees for this aspect of their career. The purpose of this study is to explore perceptions of the educational impact of IPCAs in family medicine, from the perspective of residents, staff physicians, and educators.

Methods: This constructivist grounded theory study was conducted with learners, both past and present, and preceptors in a single residency program. We conducted individual interviews and focus groups with 18 residents, 15 physicians in the first five years of practice, and 7 experienced physician educators. A constant comparative analytic approach was used.

Results: IPCAs were uniformly perceived as a weight that family physicians must carry over the course of their career. Residents described this weight as burdensome, and highlighted exacerbating factors such as inequity in workload, inconsistent expectations, and impingement on other learning and personal opportunities. Practicing physicians conceptualized the weight of IPCA work in residency as an opportunity to develop their "fitness" or ability to carry this weight in a sustainable way throughout their career.

Conclusion: If the educational opportunities of this essential component of patient care are not made explicit, residents may not have the chance to develop strategies for practice management, professional boundaries, and administrative efficiencies.

OEV 6-3

69590

Development and Evaluation of Learning Objectives for a Medical Assistance in Dying Residency Curriculum

Sarah LeBlanc Queen's University, **Susan MacDonald** Queen's University, **Nancy Dalgarno** Queen's University, **Mary Martin** Queen's University, **Karen Smith** Queen's University, **David Taylor** Queen's University, **Ross Walker** Queen's University, **Richard Van Wylick** Queen's University, **Rylan Egan** Queen's University

Background/Purpose: Currently, little is known about the most effective strategies for providing MAID education, and the importance of integrating MAID into existing curricula. The purpose of this study is to develop two sets of learning objectives (LOs) to inform a foundational medical assistance in dying (MAID) curriculum in Canadian Family Medicine (FM) and other Specialty residency training programs.

Methods: Mixed-methods were used to develop two sets of LOs for (1) FM residents, and (2) all other specialty residents. Draft FM LOs were refined using a Delphi process and focus group; specialty LOs were refined with a Delphi. FM LOs were mapped to the existing FM residency curriculum, the College of Family Physicians of Canada's 108 Priority

Topics and CanMEDS-Family Medicine roles. Specialty LOs were mapped onto The Royal College CanMEDS Roles, and Key and Enabling Competencies (KEC) to the 29 specialty programs at the Institution.

Results: Nine FM LOs were developed. Only 3 of 9 mapped readily to the curricular framework; those that focused on patient education and identification of patient goals were most readily mapped. Similarly, only 3 of the 9 Specialty LOs could be explicitly mapped to the KEC in specialties or subspecialties; LOs that focused on communication were most readily mapped. In all specialties, LOs with MAID-exclusive content revealed gaps in the current residency curriculum.

Conclusion: The developed LOs provide a guide to ensure residents obtain knowledge to counsel their patients about MAID. These LOs can be used to to develop curriculum and assess competency in other Canadian specialty residency programs.

OEV 6-4

69614

Exploring systemic barriers to providing nutrition care in residency programs

Dianne Timmins University of Calgary, **Rachel Ellaway** University of Calgary, **Rahim Kachra** University of Calgary, **Tanis Fenton** University of Calgary

Background/Purpose: Nutrition care is a key contributor to positive health outcomes, yet there is a longstanding concern that physicians' training inadequately prepares them to address patients' nutrition concerns in practice. Identifying the barriers that create and sustain this deficit is critical to integrating sustainable nutrition education in residency training. This study explored residents' and preceptors' perceived barriers to nutrition education in family medicine (FM) and internal medicine (IM) residency programs.

Methods: Taking a critical realist perspective, the investigators sought to understand the mechanisms that influenced IM and FM residents' and preceptors' attitudes towards, perceptions of, and experiences with nutrition education. Semi-structured interviews (n=20) were conducted in 2020 at the University of Calgary. Using realist inquiry approaches, data were analyzed for context-mechanism-outcome configurations, from which middle-range theories were developed.

Results: All participants reported low confidence in their ability to provide nutrition care, which acted as the key mechanism reducing their sense of preparedness and obligation to provide such care. Many mechanisms acted on their confidence, including a lack of clarity around their role in nutrition care, an absence of explicit nutrition content in curriculum and assessment, a lack of preceptor role-modeling, time constraints, low awareness of credible nutrition resources, and the ability to refer patients to dietitians.

Conclusion: This study reinforced the need and desire for a renewed focus on nutrition deficits in medical education. However, curriculum changes are likely insufficient on their own. A multidimensional approach is needed to address the systemic barriers to physicians including nutrition as an integral component of their practices.

OEV 6-5

69233

Supporting Health Professional Educators (HPEs) for Resident Field Note Assessment

Deborah Kopansky-Giles University of Toronto, **Fok-Han Leung** University of Toronto, **Danielle Dudycha** University of Toronto, **Josh Plener** University of Toronto, **Gee Hung Leo Cheong** University of Toronto, **Brendon Josh Morganstein** University of Toronto

Background/Purpose: Health Professional Educators play an important role in educating family medicine residents, however, historically they have had limited opportunity to participate in resident assessment. Field notes (FN) are low stakes assessments reflecting on clinical performance. The U of T DFCM requires inclusion of HPE-completed FNs for family medicine residents to enrich their assessment experience. Study purpose: 1. What are the perspectives of HPEs regarding: a. Knowledge attainment about HPE FN completion b. Utility of the FN training module 2. What are their experiences/perspectives in completing FNs for resident physicians

Methods: A mixed methods evaluative approach was used (questionnaire administration/focus group interviews). Study participants were U of T DFCM HPE Community of Practice (CoP) members who completed the learning module and the Qualtrics survey. They were asked to self-identify if they would be willing to participate in a subsequent focus group interview in late 2021.

Results: Data collection still in process. The education module launched in May with survey open until October 31, 2021. 130 HPE CoP members were invited. 107 HPEs completed the learning module. 14 completed the Qualtrics survey, with 8 in progress. 4 agreed to participate in the upcoming interviews. Descriptive data was obtained and a high level of knowledge attainment was seen on survey results. Qualitative results will be available in early 2022.

Conclusion: HPEs readily completed the FN training module and knowledge attainment was very good on module completion. Qualitative data will be collected in late 2021 and these results available in early 2022.

OEV 6-6

69088

MOC Pager App: Developing and Testing Simulated Pages in Ophthalmology

Heather McDonald Western University, **Monali Malvankar** Western University, **Nada Gawad** University of Alberta, **Yiannis Iordanous** Western University

Background/Purpose: Transitioning to managing the pager as a junior resident presents a steep learning curve. Dedicated training for this clinical decision-making (CDM) skill is lacking. The primary objective of this study was to formulate and test a set of simulated pages in order to create a learning and feedback tool for trainees. A secondary objective was to investigate the level of agreement amongst two expert panels comprised of residents and staff.

Methods: Simulated pages were designed in accordance with the MyOnCall (MOC) Pager app. Each page was comprised of a clinical scenario with a knowledge-based question followed by a CDM question regarding triaging. The simulated pages were distributed to ophthalmology residents and staff. Results were analyzed using a two-sample t-test and chi-squared test. Agreement was defined as ≥80%.

Results: Sixty-four simulated pages were created and distributed to 7 residents and 10 staff. Residents and staff selected the correct knowledge response 93% and 88% of the time, respectively ($p<0.05$). Agreement was reached for 84% of knowledge questions, compared to 38% of triaging questions. Agreement amongst residents was higher than staff for triaging

questions; 64%, compared to 36%, respectively (X2(1,n=17)=10.13,p=0.001)). Neither staff nor residents were more likely to choose a particular triaging response (p>0.05).

Conclusion: Results show good agreement amongst residents and staff regarding knowledge-based simulated pager questions, but much lower agreement for triaging questions. This supports the principle of multiple correct answers in modern-day CDM. The results will be used to populate the MOC Pager with simulated ophthalmology pages and provide formative feedback to trainees.

OEV 7: Black health & wellness / EDI

Virtual 3

OEV 7-1

69183

Longing to belong: a mixed methods study of medical student sense of belonging across Canada

Shima Afhami University of Calgary, **Priatharsini Sivananthajothy** University of Calgary, **Nina Castrogiovanni** University of Calgary, **Adibba Adel** University of Calgary, **Kannin Osei-TuTu** University of Calgary, **Allison Brown** University of Calgary

Background/Purpose: Medical schools across Canada are actively changing admissions processes to support equity-deserving groups (EDGs) that have and continue to be systemically excluded, specifically Indigenous and Black applicants. However, it is important to consider how diversity does not directly confer a sense of belonging, particularly without addressing structures and policies that perpetuate racism and exclusion within medical training. Belonging refers to the experience of being accepted, included, valued and feeling integral to the environment. For learners from EDGs, including Black students, microaggressions and discrimination illustrate and reinforce a sense of "otherness" contrasted with the White, affluent, heteronormative, able-bodied imagery and ideologies that medicine perpetuates. Feelings of exclusion affect learners' levels of motivation, impacting their academic success and well-being.

Methods: An explanatory sequential mixed-methods design involving both quantitative and qualitative methods is being utilized to explore how medical students across Canada from equity-deserving groups perceive their sense of belonging. In the initial quantitative strand, a cross-sectional survey of all medical students across Canada is collecting quantitative data surrounding the constructs of belonging, imposter syndrome, and burnout. Results of the initial quantitative strand will inform the qualitative phase in order to further explore and better understand the initial findings.

Results: Data collection is ongoing.

Conclusion: Through our research, we aim to shift the conversation towards the development of equitable and anti-oppressive systems within medical education. Results will contribute to the growing body of evidence used to cultivate inclusive environments that foster EDG learners' sense of belonging across all medical schools.

OEV 7-2

69510

What do we mean? Equity, Diversity, and Inclusion in Postgraduate Medical Education through a critical lens

Justin Lam University of Toronto, **Michal Coret** University of Toronto, **Carlos Khalil** University of Toronto, **Kat Butler** University of Toronto, **Ryan Giroux** University of Toronto, **Tina Martimianakis** University of Toronto

Background/Purpose: In recent years, equity, diversity, and inclusion (EDI) initiatives have been a rising priority for medical schools across North America, with increased programmatic and scholarly reform efforts in residency programs. Understanding how EDI issues are defined and operationalized, especially through the lens of critical race theory and intersectionality theory, is important in identifying new opportunities for scholarly exploration as well as areas for programmatic change.

Methods: Using a critical narrative approach, we searched the medical education literature from 2009-2019 for manuscripts that addressed equity, diversity, or inclusion in postgraduate learning environments. An initial database of 1155 articles was narrowed down by relevance to 136 articles. Analysis was informed by critical race and intersectionality theories, used to generate themes specific to equity diversity and inclusion.

Results: Most papers were descriptive in nature, documenting existing disparities without delving into underlying mechanisms of discrimination. A minority of papers applied theoretical constructs relevant to discrimination. Very few reported on interventions. Thematically, intersectionality as a focus was absent. Issues of gender, race, and ethnicity were most prominent, with some exploration of international training and immigration status, bullying and harassment, and disability. Diversity was predominantly conceptualized as an achievable end state of representation. Equity was conceptualized as fairness of opportunity. Inclusion was conceptualized as the absence of discrimination, harassment, and exclusion.

Conclusion: We problematize EDI discourses in existing literature on postgraduate medical education, and offer offering important considerations for advancing and reorienting EDI research in medical education through the lenses of critical race theory and intersectionality.

OEV 7-3

69014

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

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

Background/Purpose: Department Heads are crucial change-makers. Who these leaders are matters; however, equity, diversity and inclusion (EDI) amongst Department Heads (DH) remains a key challenge. We require a deeper understanding of barriers and enablers to equitable leadership appointments, and how DH leadership has changed over time.

Methods: We conducted a critical discourse analysis to examine underlying assumptions shaping EDI policies and DH leadership in one Canadian medical school from 2005-2021. We conducted 1) document analysis (n=17), and 2) interviews with past and present DH (n=18), several of whom also served on DH search committees (n=6).

Results: We identified several discourses framing EDI as: 1. Documentation; 2. Mentorship; 3. Numerical representation; 4. Relinquishing privilege; 5. Legal obligation; 6. Moral commitment; and 7. Aspiration. Documents reviewed framed equity as legal and aspirational, despite including a wider range of equity-seeking communities. Interview

participants demonstrated their positioning toward EDI on a continuum of change, ranging from narrow and passive ideas of EDI, to active allyship and holistic approaches. Participants largely focused on gender and race; other EDI categories and communities were noticeably absent. We observed a shift toward more collaborative, communal, and emotionally-attuned leadership approaches.

Conclusion: Discourses relating to EDI in leadership are changing, with greater awareness of race and concepts such as privilege, allyship, and the minority tax. Additional research is required to explore barriers to EDI beyond recruitment policies, and an intersectional approach to EDI that expands beyond race and gender, to include, but not limited to, class, sexuality, disability and language.

OEV 7-4

69389

[A survey of undergraduate medical students' knowledge and attitudes about gender bias - The Newfoundland and Labrador perspective](#)

Erika Maxwell Memorial – University of Newfoundland, **Gillian Sheppard** Memorial – University of Newfoundland, **Yanqing Yi** Memorial – University of Newfoundland

Background/Purpose: Despite the increasing number of female physicians, women still experience gender bias throughout their medical careers. Female patients also experience bias from their physicians. The purpose of this research is to explore medical student awareness of the gender bias in medicine with the ultimate goal of increasing awareness and reducing the gender bias in medicine.

Methods: We performed an exploratory survey of medical students at Memorial University in St. John's, NL. We used the Nijmegen Gender Awareness in Medicine Scale (featuring 5-point Likert scales) as our questionnaire and measured students' gender sensitivity, gender role ideology towards patients (GRIP), and gender role ideology towards doctors (GRID). We analyzed the data using averages and t-tests.

Results: Mean gender sensitivity scores were around 4/5 indicating high gender sensitivity. GRIP mean scores were all less than 2/5 indicating that students did not hold strong stereotypical views towards patients. GRID mean scores were around 2/5 indicating that students did not hold strong stereotypical views towards doctors. Trends showed female and urban students were less bias than male and rural students, although a significant difference only existed across gender in GRIP scores (p = 0.01). The results showed that participants have a high level of awareness and understanding of gender bias in medicine and that their awareness does not vary significantly by gender and rurality.

Conclusion: Students had largely non-biased ideologies surrounding gender in medicine and female students were slightly less biased than male students.

OEV 7-5

69579

[Building Transgender Curriculum in the Caribbean](#)

Natalie Greaves University of the West Indies--Cave Hill, **Maisha Emmanuel** University of the West Indies--Cave Hill, **Arianne Harvey** University of the West Indies--Cave Hill, **Healther Harewood** University of the West Indies--Cave Hill, **Jill Gromer** Florida State University, **Azim Majumder** University of the West Indies--Cave Hill, **Michael Campbell** University of the West Indies--Cave Hill

Background/Purpose: This study explored medical educators' understanding of transgender terminology and identified their perceptions regarding 1) health care system responsiveness to needs of transgender people and 2) incorporating transgender health into existing curriculum.

Methods: An interpretivist qualitative methodology was used. Medical educators responsible for undergraduate and postgraduate curriculum development were purposively sampled. Fifteen of 18 eligible educators participated in two focus groups (FG1 n=7, FG2 n= 8) conducted via Zoom by a female facilitator with training in qualitative research. FGs averaged 93 minutes and were audio and video-recorded, transcribed verbatim, and analysed via a thematic approach using deductive and inductive coding assisted by NVIVO 12 Pro.

Results: Educators were knowledgeable about terminology and physical and psychosocial needs of transgender people. Participants viewed transgender as an emerging health priority. However, infrequent personal and clinical contact with transgender people, as well as educational and clinical resource constraints, fueled reservation about including transgender as a standalone component of curriculum. Importantly, participants articulated a need for broad-based diversity content, including disabilities, primarily for undergraduates. Transgender health was deemed relevant for postgraduate psychiatry and subspecialty training in other areas of medicine. Participants also expressed concern regarding stigma and structural discrimination against transgender people, especially in medical and healthcare systems.

Conclusion: Participants demonstrated knowledge of transgender and transgender health care needs. Areas for improvement in health care responsiveness were identified related to structural stigma and discrimination. Including transgender health in medical curriculum requires pragmatic optimization of teaching resources.

OEV 7-6

69607

[Rejecting the imposter label: Exploring the link between workplace discrimination and women trainees' and faculty physicians' perceptions of their competence](#)

Kori LaDonna University of Ottawa, **Emily Field** Western University, **Lindsay Cowley** University of Ottawa, **Kimberley Thomas** University of British Columbia, **Chris Watling** Western University, **Shiphra Ginsburg** University of Toronto, **Rachael Pack** Western University

Background/Purpose: When smart and accomplished people feel like intellectual frauds, their feelings of self-doubt can create barriers to professional development. Imposter syndrome (IS) is typically conceptualized as a personal problem requiring individually-focused solutions, yet external forces such as discrimination may explain why women may be disproportionately affected by IS. Our purpose was to explore the link between workplace discrimination and women trainees' and faculty physicians' perceptions of their competence.

Methods: 40 women (n=27 trainees) participated in semi-structured interviews exploring how macro and microaggressions shape self-assessment. We identified codes and categories using the constant comparative approach customary to constructivist grounded theory.

Results: Participants recounted multiple instances-both subtle and explicit-where their contributions and capabilities were questioned because of their gender. While some participants endorsed moments of self-doubt, most emphatically denied that discrimination triggered imposter feelings. Instead, participants suggested that incompetence was imposed on them by peers, preceptors, or patients. Consequently, rather than provoking IS, participants recognized that the problem was discrimination, not their competence: "It's not imposter syndrome, it's they don't want me in the field."

Conclusion: The link between workplace discrimination and IS appears tenuous, aligning with recent debates arguing that conversations about IS have not fully accounted for how workplace discrimination shapes internal and external perceptions of women's competence. Applying the imposter label to women may be a form of psychological manipulation that not only puts the onus on women to solve entrenched sociocultural and systematic failings, but also positions arrested professional development as a personal failing.

OEV 8: Pot Pourri

Virtual 4

OEV 8-1

69594

Clinical reasoning and simulation: facilitating hypothesis prioritization using simulated patients. Data from a quantitative research.

Juliane Ratté University of Ottawa, **Isabelle Burnier** University of Ottawa, **Sophie Deroock** University of Ottawa, **Stéphanie Benoit** University of Ottawa, **Manon Denis-Leblanc** University of Ottawa

Background/Purpose: Prioritizing diagnostic hypotheses can be difficult for novice medical students who lack clinical exposure. Simulated clinical reasoning (CR) clinics allow students to practice focused histories. Since the collection of clinical data depends on such things as the students' perception of key indicators of a disease, simulated patients (SP) who provide this information have an important role in the simulation. This pilot study seeks to test whether the interpretation of key elements by SPs influences CR prioritization among medical students.

Methods: The diagnostic hypotheses of two cohorts of students at the same academic level were compared. The SPs in the experimental group were given a specific briefing on how to interpret key elements while those in the control group had only a traditional briefing.

Results: The students in the experimental group prioritized expert-validated hypotheses (most severe and most common) more than those in the control group. The control group students demonstrated greater variability in their diagnostic choices.

Conclusion: Targeted interpretation of key elements by SPs would help novice medical students prioritize their diagnostic hypotheses. By developing their observational skills, students would become more sensitive to perceptual indicators given by the patient, which would improve their patient interactions. Simulated CR clinics would therefore have an impact beyond CR learning.

OEV 8-2

67775

Deliberate self-harm: self-report survey among undergraduate medical students.

M Junaid Ayub Medical College, **M Junaid Khan** Ayub Medical College, **Omar Farooq** Ayub Medical College

Background/Purpose: Deliberate self-harm (DSH) is a common phenomenon in adolescents and young adults around the world. Research about DSH has gained significant interest with researchers in the past decade. In Pakistan, however, DSH remains an underexplored area with very few studies. The aim of the present study was to find out the prevalence of DSH in a sample of medical college students from KPK. We also aimed to examine some of its demographic and contextual correlates.

Methods: A cross-sectional study was conducted using an anonymous self-report questionnaire. Overall, there were 175 complete responses. Data was collected on the internet via a google form. Only medical students from KPK were eligible to participate in the study. Convenience sampling technique was used to draw out the sample. There was a socio-demographic questionnaire, followed by the Inventory of Statements about Self Injury (ISAS).

Results: Overall, 12.6% (N=22) of the participants reported a positive history of DSH. Pulling hair was the most used method, followed by cutting, carving, burning, banging or hitting themselves and swallowing dangerous substances. Majority of the participants said that they harm themselves when they are alone, and act on their urge to self-harm within 1 hour. The functions of DSH were not found to be related to age, gender, or residence of the participants.

Conclusion: Deliberate self-harm is common in young adults. Prevalence rates are like other studies from different parts of the world.

OEV 8-3

69358

Assessing mental health: Analysis of the Wellness Check Questionnaire for medical students at the University of Ottawa

Selena Laprade University of Ottawa, **Kay-Anne Haykal** University of Ottawa

Background/Purpose: The primary objective of this study is to verify the risk factors for mental health in medical students at the University of Ottawa. The secondary objectives are to verify the impact of demographic variables on these risk factors, and the change in the students' mental health throughout their studies.

Methods: Medical students have a mandatory wellness check during their first and third year. This evaluation includes a questionnaire addressing: demographic information and questions on mental health and its risk factors such as physical health, sleep, social support, financial stress, studies and career, stress and drug and/or alcohol use.

Results: The results of the quantitative analysis indicate that there is no statistically significant difference in mental health between first- and third-year students when co-variables are accounted for. However, the results indicate that 59% of the variation of the average score for mental health is explained by the following risk factors (R2=0.594; F(9, 895)=145.31; p<0.01): physical health (β=0.055; p<0.05), sleep and fatigue (β=0.269; p<0.001), social support (β=0.167; p<0.001), studies and career (β=0.240; p<0.001), and stress and drug and/or alcohol use (β=0.241; p<0.001). Some demographic variables also have a statistically significant effect (p<0.05) on these risk factors.

Conclusion: In conclusion, there is no statistically significant difference between the psychological health of first- and third-year students, but other risk factors can have an impact. Thus, this study will help determine how to allocate resources strategically based on risk factors to improve mental health in medical students.

OEV 8-4

69642

Ableism in/action: Conceptualizing disability's ontological erasure in medical education curricula as epistemic injustice

Emily Nusbaum Mills College, **Neera Jain** University of British Columbia

Background/Purpose: Longstanding international evidence demonstrates that disabled people experience inequitable healthcare outcomes. Despite this, most medical schools insufficiently include critical disability content in their curricula, reinforcing ideas of disability as deficit. These absences have primarily been addressed through short interventions driven by individual faculty interest. Using theoretical lenses from critical disability studies and philosophy, our conceptual paper illuminates this entrenched problem as one of ableism in/action

Methods: We conducted an inductive analysis of relevant extant literature and data. We applied three theoretical lenses to interpret these findings: ontological erasure, hermeneutical injustice, and ableism. A conceptual model was used to demonstrate how each element works together to create and perpetuate curricular erasures.

Results: We theorize that ontological and epistemic erasure of disability in medical curricula is fueled by the willful hermeneutical ignorance of alternative ways of knowing disability, supported by systemic ableism. Medicalized understandings of disability that dominate curricula restrict the hermeneutical resources available to future medical professionals, leaving them to understand disability primarily within a deficit-oriented frame. These erasures enact hermeneutical injustice on medical students and render them potential perpetrators of epistemic injustice on future patients. This cycle continues without substantial intervention and taken-for-granted in an ableist society.

Conclusion: Health professionals remain unequipped to serve and honor disabled people and their lived experiences. The agentic erasure of epistemic resources from critical disability studies is an egregious omission that requires urgent remedy. Our analysis adds a new ethical lens to medical education's disability erasures and identifies research and practice needed to address this problem.

OEV 8-5

69633

A turning of the tide - are Med Ed and Med Tech finally on the same wavelength ?

Rashaad Bhyat Canada Health Infoway, **Marie Rocchi** University of Toronto

Background/Purpose: Gaps have been identified in medical education relating to digital technologies, health informatics, or e-health / digital health. Unfortunately the medical curriculum is very full, leaving little room for formal health informatics education. During the mass pivot to virtual care during the COVID19 pandemic, many organizations created educational tools to support physicians and learners in their adoption of virtual care. However, while these tools sufficed, ongoing change management is needed in the transition to a hybrid model of virtual care mixed with in-person care. The pandemic may prove to be the catalyst for teaching digital health concepts in medical schools, including new competencies.

Summary of the Innovation: In consultation with clinical stakeholders, federal government-funded organizations collaborated on a toolkit to support a virtual care learning collaborative, bringing together clinical teams to share and spread virtual care best practices nationally. Simultaneously, a key clinical stakeholder received support to expand an academic EHR and e-learning resources to support medical and pharmacy students in learning about virtual care. Together these innovations in education and training support the optimal use of virtual care in clinical practice.

Conclusion: What tools and resources work well for busy medical learners in this new world of digital health education? Can government-supported change management initiatives have a positive impact on promoting virtual care and digital health best practices, and are they applicable to medical education? As new resources are developed, how are systemic discrimination, equity, and diversity addressed? This session aspires answer these questions, by sharing evaluation results from the aforementioned innovations.

OEV 8-6

69241

Is that Realist? Reclaiming a Theoretical Orientation to Theory-Based Evaluation: A Scoping Review

Betty Onyura Centre for Faculty Development, Temerty Faculty of Medicine, University of Toronto at Unity Health Toronto, **Latika Nirula** Centre for Faculty Development, Temerty Faculty of Medicine, University of Toronto at Unity Health Toronto, **Qian Wu** Centre for Faculty Development, Temerty Faculty of Medicine, University of Toronto at Unity Health Toronto, **Hollie Mullins** Centre for Faculty Development, Temerty Faculty of Medicine, University of Toronto at Unity Health Toronto, **Kurt Grunsky** Toronto District School Board, **Deena Hamza** University of Alberta

Background/Purpose: Program evaluation is part of routine practice across medical education. However, reflective examination on the practice of program evaluation itself is largely absent, resulting in scant evidence about the characteristics, quality and utility of evaluation. The paper addresses this gap by examining the uptake of theory-based evaluation (TBE) methods in medical education. It explores (1) the chronological and methodological trends; (2) the patterns in the foci of evaluation questions; and (3) the ways in which TBE studies aligned or mis(aligned) with the espoused theoretical approaches.

Methods: A scoping review is an ideal knowledge synthesis approach for topics on which there has been limited empirical attention, and where the literature considered may not lend itself to outcome-focused questions addressed by systematic reviews. The review was conducted in accordance with methodological guidelines provided by Arksey and O'Malley (2005) using dual, independent screening, of articles for inclusion, as well as of abstracted data. Abstracted data were synthesized thematically.

Results: The scoping review identified 30 studies that reported employing TBE methods. Chronological trends suggest an increased uptake of this family of approaches with the most commonly used methodology being realist evaluation. Findings are grouped under five major themes: methodological (mis)alignment, limitations in evaluative scope and participation, positive vs negative outcome reporting, patterns in evaluation project leadership/conflicts-of-interest, and patterns in practice recommendations.

Conclusion: By examining the overarching characteristics and trends in evaluation practices, the paper offers directions for advanced exploration and theorizing on how to optimally evaluate diverse educational programs, and meaningfully incorporate more contemporary methodologies.

OFV: April 26, 2022, 13:30 MST

OFV 1: Relearning perspectives on medical education

Virtual 1

OFV 1-1

69596

The Implementation of a Three-way Medical Education Partnership in a Resource-Constrained Environment: Progress and challenges

Amana Collier Queen's University, **Joel Parlow** Queen's University, **Scott Berry** Queen's University, **Nicholas Cofie** Queen's University, **Nancy Dalgarno** Queen's University, **Laura Carson** Queen's University, **Gregory Klar** Queen's University, **Melanie Jaeger,** Queen's University, **Nazik Hammad** Queen's University

Background/Purpose: The Faculty of Health Sciences at Queen's University with support from the Royal College of Physicians and Surgeons

of Canada (RCPSC), recently signed a partnership agreement with the Haramaya University College of Health and Medical Sciences (CHMS - Haramaya, Ethiopia). The goal of this partnership is to build capacity and expand the postgraduate medical education (PGME) training programs at CHMS. We examine the appropriateness of a three-way model of delivering medical education in a low-resource settings.

Summary of the Innovation: The collaborative partnership agreement was designed though a series of stakeholder consultations with partners in Ethiopia. Regular bi-monthly partner meetings are held to provide updates on progress, opportunities, and challenges encountered in the implementation process. A needs assessment was designed to better understand the current care provided, local priorities, challenges, and barriers regarding the provision of emergency/oncology/anesthesiology care. With the financial and technical support of the RCPSC, the implementation of the partnership agreement started smoothly until the onset of COVID-19, forcing an adaptation to virtual modes of collaboration and teaching. Despite challenges arising in the remote context, such as internet connectivity limitations, the study partners have established innovative ways to virtually connect.

Conclusion: The three-way model provides a unique framework for facilitating a locally-driven intervention to strengthen the health workforce in a resource-limited setting. The lessons learned during the innovative adaptation to virtual platforms and modes of teaching will offer significant value for future projects of a similar nature in low-resource settings.

OFV 1-2

69306

Youth perspectives on healthcare careers in the province of British Columbia during COVID-19

Sean Maurice University of British Columbia, **Alishia Lindsay** University of Northern BC, **Neil Hanlon** University of Northern BC

Background/Purpose: The COVID-19 pandemic created widespread stress, uncertainty and disruption, and the implications of these will be felt in many areas of society. One area of interest is how youth think about healthcare career and educational opportunities.

Methods: We distributed a Qualtrics survey to six high schools across the province between December 2020 and April 2021. The survey asked youth about their awareness of healthcare careers, sources of information about career opportunities, their own level of interest in pursuing healthcare career, and potential barriers to education and training. Quantitative data were analyzed descriptively. Qualitative data were analyzed thematically using an inductive approach to coding, and themes were generated through a semantic approach to summarize the data.

Results: In total, 71 students in four schools completed the survey, with 25 responses coming from two small town schools, 26 from a school in a medium-sized city, and 20 from a school in a larger urban centre. Results reveal a generally high level of awareness of healthcare careers, with no geographical variation. However, students in the two rural schools were less likely to indicate that they would pursue post-secondary training and less likely to consider themselves qualified to do so. COVID-19 did not appear to affect student interest in healthcare as a career option.

Conclusion: These data indicate that, although rural youth have awareness of healthcare careers comparable to urban youth, rural youth are less likely to pursue a healthcare career. This study supports the need for initiatives to attract rural youth into healthcare careers.

OFV 1-3

69454

Characterizing Generalist Clinical Practice: systematic mixed studies review

Martina Kelly University of Calgary, **Sarah Cheung** University of Calgary, **Sophie Park** University College London, UK, **Agalya Ramanathan** University College London, **Surinder Singh** University College London, **Anna Stevenson** University of Cambridge

Background/Purpose: Generalist practice spans a number of clinical practices; but core attributes of generalism are not always apparent to learners. This study characterize how generalism is described in clinical literature.

Methods: Systematic mixed studies review including quantitative, qualitative, mixed-methods studies and systematic reviews of physician generalist practice. Medline, Psycinfo, Socioindex, EMBASE, OVID Healthstar, Scopus, Web of Science were searched for English language studies from 1999 to 2020, using a structured search.

Results: Of 6541 papers; after deduplication, 2,2215 remained.389 studies underwent full-text screening, 262 studies were included. Studies spanned 25 countries. Two hundred and six studies (78%) were quantitative,33 (12.6%) qualitative, 13 (5%) reviews, 6 (2%) used mixed methods. In one hundred and twenty-two studies (47%), no explicit definition or description of the generalist participants was provided. These studies reported inclusion of 'generalists or generalist practitioners' but did not provide any further participant details. In the remaining 139 (53%) of studies, two types of definitions were identified. In the majority of studies, generalists were described relative to specialists, as having an absence of additional skills e.g. lack of (sub)specialist accreditation or lack of training. 23 studies provided affirmative characterizations of generalists such as providing comprehensive care, continuity of care or how ongoing relationships contributed to patient care.

Conclusion: Descriptions of generalism as a 'deficit' needs to be counteracted by affirmative characterizations that illustrate generalist expertise. Identifying similarities and differences between the meaning of 'generalism' and 'generalist' across disciplines provides opportunities to work together. Findings are relevant for generalist disciplines, educational leadership, and workforce planners.

OFV 1-4

69603

Education influences on the Geographic Disposition of Family Physicians

Asiana Elma McMaster University, **Dorothy Bakker** McMaster University, **Gina Agarwal** McMaster University, **Monica Aggarwal** University of Toronto, **Neil Johnston** McMaster University, **Meera Mahmud** McMaster University, **Lawrence Grierson** McMaster University

Background/Purpose: The problem of family physician maldistribution has been a consistent challenge for health human resource planners for decades. Patients with poor access to a family physician are less likely to receive comprehensive healthcare, timely diagnosis, or specialist care; measures of access directly linked to health outcomes. The Canadian medical education system may present opportunities to encourage medical students to eventually practice in underserved areas.

Methods: A retrospective observational study was conducted to develop models of association between personal and education factors in students who graduated from McMaster University's MD Program between 2010 and 2015 and subsequently completed CFPC-accredited residency program. Study data included the postal codes of each subject's residence during secondary school, and the locations of their pre-clerkship, clerkship, residency, and eventual practice. Postal code data were indexed

to Health Region Peer Groups, and of National Neighbourhood Income Quintiles. Logistic regression models were developed for each dependent variable (i.e., practice location as expressed by each index).

Results: Data for 347 individuals were included. The models revealed consistent significant associations between locations of postgraduate medical training and eventual practice locations across a variety of indices (P= <0.001-0.035). Index-specific analyses also showed that the place of secondary school education is often associated with eventual family practice location (P= 0.027-0.041).

Conclusion: Medical educators may wish to consider the value of pairing preferential selection policies with distributed postgraduate residency training as a means of promoting a better geographic distribution of family physicians.

OFV 1-5

69107

Design Sprints in Medical Education: An approach to creating innovative solutions

Melanie Lewis University of Alberta, **Preston Smith** University of Saskatchewan, **Geneviève Moineau** The Association of Faculties of Medicine of Canada, **Victor Do** University of Alberta

Background/Purpose: The R1 residency matching process was significantly disrupted by COVID-19. In response to the need to transition to virtual interviews and cancel visiting electives for the 2021 learner cohort, the Association of Faculties of Medicine of Canada (AFMC) led a change management process which centered principles of learner engagement, collaboration, and equity. A group of faculty and learners were tasked with developing solutions and supports for the virtual R1 match.

Summary of the Innovation: The group participated in facilitated design sprints, a process first developed by Google Ventures which allow a team to work quickly to create, build and test solutions to issues with desired end users. While design sprints have been readily used in many fields, their use in medical education has been very minimal and they have not previously been used for large-scale projects in Canadian medical education. Also unique was that our process was entirely virtual. Our group participated in two design sprints. The first resulted in our recommendation for a CANPREPP (Canada's Portal for Resident Program Promotion). Our second sprint resulted in the creation of the virtual interview guides for programs and applicants.

Conclusion: The products developed because of the design sprint have been greatly appreciated by users. Design sprints are an innovative way to enable rapid change in medical education. Moving forward we will work to adopt metrics which can help define process "success" and continue to optimize and tailor them for medical education.

OFV 1-6

69644

A scoping review of adaptive expertise in health professions education

Nathan Cupido University of Toronto, **Shelley Ross** University of Alberta, **Brian Hess** The College of Family Physicians of Canada, **Nancy Fowler** The College of Family Physicians of Canada, **Karen Schultz** Queen's University, **Kathy Lawrence** The College of Family Physicians of Canada, **Theresa van der Goes** University of British Columbia, **Luce Pelissier-Simard** Université de Sherbrooke, **Cheri Bethune** Memorial – University of Newfoundland, **Martin Potter** Université de Montréal

Background/Purpose: The concept of adaptability is a key component of the College of Family Physicians of Canada's (CFPC) approach to ensuring that family physicians are responsive to the evolving needs of their patients and communities; however, adaptability as a construct has many different definitions in health professions education literature. Adaptive expertise provides a theoretical framework to examine the expectations of practice-and an understanding of adaptability-within family medicine. Our objective in this study was to identify from the literature how adaptive expertise can be incorporated into training in family medicine residency programs.

Methods: We conducted a scoping review of health professions education literature using five databases (MedLine, PubMed, ERIC, CINAHL, PsycINFO) searched for the exact term "adaptive expertise".

Results: The initial search returned 212 articles; 58 met inclusion criteria. Adaptive expertise is a multifaceted construct encompassing cognitive, metacognitive, motivational, and dispositional aspects. It emphasizes a balance between the efficient use of previous knowledge and innovative problem solving in novel or complex situations. The ability to adapt to novel clinical problems is important for the patient-centred, generalist care required of family physicians.

Conclusion: The results of this review will inform recommendations for the assessment of adaptability in family physicians by the CFPC. From the perspective of assessment, training programs must ensure that residents are equipped to address complexity and ambiguity in independent practice. An explicit focus on the development of adaptability in residency is crucial to preparing graduates to meet the expectations of family physicians in Canada's healthcare community.

OFV 2: Black health & wellness / unlearning / relearning
Virtual 2

OFV 2-1

69693

The Experiences of Black Medical Students in Canada: A Critical Perspective

Gbolahan Olarewaju University of British Columbia, **Bolade Shipeolu** University of Toronto, **Asli Fuad** University of Ottawa, **Clara Osei-Yeboah** University of Toronto, **Jane Wanjiru** University of British Columbia, **LLana James** Queen's University, **Stephanie Nixon** University of Toronto, **Maria Hubinette** University of British Columbia

Background/Purpose: Despite Black students being among the most underrepresented students in Canadian medical schools, there is a dearth of Canadian literature exploring their experiences of an educational system built around whiteness. This is especially important given the recent initiatives aimed at making medical education more accessible to Black students. Without Canadian research, these initiatives are often rooted in anecdotal evidence or findings from the American context. Thus, this study explores Black students' perspectives on the ways their Blackness has shaped their medical school journey in Canada, and their perceived needs for thriving in their medical careers.

Methods: Critical Race Theory (CRT) is the structural backdrop against which the study was designed. We recruited Black medical students across the country for participation in 60-90-minute semi-structured interviews conducted in English or French by other Black medical students. Using the DEPICT method of qualitative analysis, we analyzed participants' narratives guided by core CRT concepts like intersectionality, anti-essentialism, and institutionalized racism.

Results: 9 participants were interviewed including students from Quebec (2), Ontario (4), Atlantic (1), and Western Canada (2). We will present preliminary findings and insights about students' experiences from admissions to curriculum, and their knowledge and capacity-building needs.

Conclusion: This first of its kind study is a work in-progress. Aside from shedding some light on Canada-specific factors contributing to under-representation of Black medical students, it will be foundational for future research and programmatic innovations involving these students.

OFV 2-2

68960

Building capacity for inter-institutional data-sharing to support medical education research: Identifying risks, benefits, values, and best practices

Lawrence Grierson McMaster University, **Brenton Button** Northern Ontario School of Medicine, **Alaa Youssef** University of Toronto, **Alice Cavanagh** McMaster University, **Rachelle Lee-Krueger** University of Ottawa, **Kestrell McNeill** McMaster University, **Kulamakan Kulasegaram** University of Toronto

Background/Purpose: Education programs, licensing, certification, and regulatory bodies, provincial health human resource agencies, and physician and physician-in-training advocacy groups in Canada share the common goal of a self-regulating health human resource and healthcare system that is effective in constantly meeting the evolving healthcare needs of all persons who access it, as well as the professional aspirations of its physician constituents. These entities collect considerable data, which have potential to support this goal but that are rarely used beyond their pre-specified purposes or linked across periods of training and practice. To realize the promise of inter-institutional data-driven research, it is necessary to mitigate the potential for harm this work may cause, including the accentuation of social inequity.

Methods: Canadian medical education stakeholders and data stewards participated in 5 knowledge synthesis workshops aimed at building pan-Canadian consensus on the ethical use of inter-institutional education data for research. The workshops were augmented by pre- and post-event consultations; invited presentations from data sharing experts from the fields of ethics, higher education, library science, and epidemiology; and an observer group of representatives of physician trainee advocacy groups who ensured trainee perspectives were integrated into the final consensus statement.

Results: Participants agreed that data-driven research must value commitments to privacy, informed consent, autonomy, non-discrimination, and appropriate research purposes and data collection.

Conclusion: The project yielded three recommendations for ensuring these values are incorporated: the establishment of appropriate governance, the engagement of a trusted data facility, and adherence to the Tri-Agency Policy on Research Data Management.

OFV 2-3

69036

Influential Structures: The impact of Institutional Structures on the Implementation and Practice of Competency Based Medical Education at the University of Manitoba

Benjamin Collins University of Manitoba, **Joanne Hamilton** University of Manitoba, **Ming-Ka Chan** University of Manitoba, **Ganesh Srinivasan** University of Manitoba, **Christen Rachul** University of Manitoba

Background/Purpose: Specialty training programs in Canada began implementing Competency Based Medical Education (CBME) in 2017. The implementation of CBME is influenced by a range of factors, including institutional structures, such as program size, department organisation, and program support. Our study describes how these structures affected the implementation of CBME across programs and shape the ongoing practice of CBME at the University of Manitoba.

Methods: We conducted a realist evaluation using data from interviews with Program Directors (n=18), Program Administrators (n=12), and focus groups with faculty (n=8) and residents (n=16) from 2018-2021. Our program theory was guided by the core components of CBME, as well as internal and external readiness checklists and implementation planners. The data were studied using a template analysis guided by our program theory.

Results: Our findings demonstrate how institutional structures influenced the implementation, including more challenges for larger programs and programs with faculty at numerous sites, challenges with participation as faculty are responsible to their Department Head and not the Program Director, and the importance of longitudinal faculty development strategies to support CBME. These challenges did not impede the goals of CBME, but do highlight ongoing issues, such as limited human and financial resources for maintaining CBME and increasing faculty accountability to the program.

Conclusion: Our realist evaluation highlights the importance of institutional structures as a major context into which the CBME is introduced. This context directly affects the implementation process and may influence the longitudinal practice of CBME.

OFV 2-4

68755

Mitigating the "Imposter Syndrome" in Medical Education: A Multi-Centre Study on the Roles of Self and System

Adam Neufeld University of Calgary, **Oksana Babenko** University of Alberta, **Hollis Lai** University of Alberta, **Clark Svrcek** University of Calgary, **Greg Malin** University of Saskatchewan

Background/Purpose: Imposter syndrome (IS) has consistently been associated with distress in Medicine. Although various explanations for IS have been proposed in the literature, the concurrent roles of self-determination (i.e., self) and learning environment (i.e., system) remain unknown.

Methods: We invited 1,450 students from three Canadian medical schools to complete a survey, containing the Clance Imposter Phenomenon Scale and scales developed from Self-Determination Theory (SDT). Grounded in SDT, we used regression to investigate how different general causality orientations (impersonal, autonomy, control), types of motivation towards medical training (autonomous vs. controlled), and satisfaction of basic psychological needs (autonomy, competence, relatedness) in the learning environment predicted IS frequency/severity. Analysis included the prevalence of IS and any effects of gender and ethnicity.

Results: Data from 277 (19%) medical students were assessed, with 73% meeting the established criteria for IS. Having an impersonal orientation, controlled motivation towards medical training, and lower perceptions of psychological needs being met in the medical program, were associated with more frequent/severe IS. Females suffered from worse IS than their male peers, while ethnicity had no effect on IS severity. Together, these factors accounted for 37.6% of the variance in students' IS experiences.

Conclusion: Both individual (i.e., self) and environmental (i.e., system) factors appear to be potent determinants of IS among medical students. Practical implications of these findings are discussed within the medical education context.

OFV 2-5

69360

[From Changing the System to Working the System: A Foucauldian Genealogy of the CanMEDS Health Advocate Role](#)

Brett Schrewe University of British Columbia

OFV 2-6

68644

[Parsing physicians' professional roles in addressing IPV: A sociocultural analysis](#)

Alice Cavanagh McMaster University, **Anita Acai** McMaster University, **Melissa Kimber** McMaster University, **Harriet MacMillan** McMaster University, **Stacey Ritz** McMaster University, **Meredith Vanstone** McMaster University

Background/Purpose: Health advocacy broadly encompasses the activities upon which physicians draw in order to improve health outcomes. From an educational perspective, the CanMEDS 2015 Health Advocate Role influentially governs how programs train learners to consider working towards improving our health care system. Yet its conceptual ambiguity has been an ongoing problematic concern.

Methods: This work uses Foucauldian genealogy to examine how the Health Advocate Role has been discursively constructed over time. Drawing upon an archive of texts including all three of its iterations in CanMEDS, their parallel CanMEDS-Family Medicine versions, the Educating the Future Physicians for Ontario Project, and national and international policy documents, it traces shifts in language from present to past to understand how the Role shapes the possibilities for educating trainees to work for a more equitable health care system.

Results: The Health Advocate Role has progressively emphasized a discourse of working within the system for better individual clinical care focused upon individual patient-level interactions. At the same time, a discourse of working to change the system for a healthier society, or societal-level actions, has been marginalized despite its clear alignments with national and international policy positions on health care from the last forty years.

Conclusion: This discursive shift occurred in part to offer curricular design flexibility to the numerous programs under the aegis of the Royal College. However, one unintended effect is a problematic divergence between what a powerful framework derived from societal needs claims to be important and what society and its governing bodies and structures may actually desire.

OFV 3: CBME

Virtual 3

OFV 3-1

69664

[Developing a Patient Safety Culture Training Curriculum for Healthcare Professionals](#)

Wei Wei University of Toronto, **Eulaine Ma** University of Toronto, **Certina Ho** University of Toronto

Background/Purpose: There is currently a paucity of ready-to-use, easy-to-translate patient safety culture training materials or guidelines for regulatory or health professional bodies to apply across a diversity of healthcare settings. Our project is aimed to develop a translatable patient safety culture curriculum to support a multi-disciplinary provincial regulatory authority in Manitoba in advocating patient safety culture and directing province-wide patient safety initiatives.

Methods: A structured grey literature search was performed to find relevant guiding documents from patient safety organizations, including those in the United Kingdom (UK), Canada, United States (US), Australia, and New Zealand. We identified websites of regulatory authorities and policy institutes with a mission on patient safety, then located relevant documents on these sites via targeted Google search. Materials were synthesized through extracting overlapping competencies relevant to patient safety culture.

Results: Four patient safety guiding documents were identified from: UK (National Health Service), Canada (Canadian Patient Safety Institute), US (International Health Institute), and the World Health Organization, from which a course syllabus was synthesized with a total of five core competencies and 21 learning objectives, ranging from Organization Culture to Safety Leadership. We adopted Bloom's taxonomy and segregated the learning outcome domains into knowledge, skills, and attitude in the resulting Patient Safety Culture Training Curriculum for Healthcare Professionals.

Conclusion: Our syllabus was presented to key stakeholders of patient safety in Manitoba. It serves as a primer for subsequent application and training evaluation. Patient safety culture training requires concerted efforts, collaboration, and innovations from all health professions globally.

OFV 3-2

69654

[Implementing CBME in Multiple Residency Programs: A Workshop to Structure and Monitor Programs' Priorities Using ADDIE](#)

Alexandre Lafleur Université Laval, **Marie-Julie Babin** Université Laval, **Claudie Michaud-Couture** Université Laval, **Miriam Lacasse** Université Laval, **Yves Giguère** Université Laval, **Christyne Allen** Université Laval, **Nathalie Gingras** Université Laval

Background/Purpose: Academic institutions face similar challenges when implementing competency-based medical education (CBME) in multiple training programs of different size, length and structure. Many program leaders have reported that their institution had not adequately prepared, structured, or monitored the implementation process. Others asked for more visible implementation activities held by their institution.

Summary of the Innovation: We organized half-day workshops with four work sessions: core competencies, competency portfolio, curriculum mapping, and competence committee. Program teams, composed of the program director, faculty members, and resident representatives, decided their priority tasks after each work session. We classified tasks into ADDIE pedagogical design stages (Analysis, Design, Development, Implementation, Evaluation). We conducted interviews at 12 months. Programs (n=29) prioritized mainly tasks of Design (37% of tasks), Development (24%) and Analysis (21%). At 12-month follow-up (n=17), 20% of the tasks were initiated, 22% reached a higher stage, 33% reaching Implementation/Evaluation. Programs needed material and financial resources for Analysis/Development tasks, and faculty training for Implementation/Evaluation tasks.

Conclusion: Our half-day workshops overcame many challenges of faculty development in CBME. It was a visible institutional action offering efficient and individualized support to many programs in a short period of time. Work sessions provided a structure to commit to priority tasks. Their classification into ADDIE stages systematized the monitoring and the search for solutions. This method could allow institutional leaders to identify late adopters and address solutions earlier in the overall institutional transition.

OFV 3-3

69376

Bridging the EPAs in UGME and PGME - an evaluation and quality improvement practice of EPAs in UGME

Shujiao WANG McGill, **Sabrina Fallavollita** McGill, **Carlos Gomez-Garibello** McGill, **Marian Jazvac-Martek** McGill, **Melanie Mondou** McGill

Background/Purpose: Following the trend of Competency Based Medical Education (CBME), Entrustable Professional Activities (EPAs) offer a practical approach to assessing competence and now being increasingly incorporated into undergraduate medical education (UGME). In an attempt into improve integration of EPAs across the medical education continuum, there is a strong need further the research on how to develop and implement the EPAs efficiently and effectively in UGME.

Summary of the Innovation: An evaluation of EPA1 implementation data from our institution realized that the old EPA form did not fully reflected the entrustment scale at the undergraduate level, and it is difficult to track EPA longitudinally and simultaneously keeping assessors and students engaged in the process. To improve the quality of EPAs in UGME, a new EPA1 evaluation form was created and piloted in 9 disciplines, which includes 1) a refinement and expansion of the entrustability grading scale which clarifies the criteria and expectations; and 2) an alignment to PGME EPA forms in terms of structure and language. The analysis of the 3091 new forms revealed that students' performance significantly and continually improved over their training (p<.01), and both the educators and students found the evaluation was more appropriate and valid than previous.

Conclusion: EPAs could be operationalized for UGME if the entrustment scales were designed appropriately and aligned with PGME. This quality improvement practice not only provides the what-is and how-to to bridge the gap, but also increases transparency regarding expectations of the development of student competencies and help ensure safe and quality patient care.

OFV 3-4

69179

A Six-Step Model for Developing Competency Frameworks in the Healthcare Professions

Alan Batt Monash University, **Brett Williams** Monash University, **Jessica Rich** Queen's University, **Walter Tavares** University of Toronto

Background/Purpose: Competency frameworks are developed for a variety of purposes, including describing professional practice and informing education and assessment frameworks. Despite the volume of competency frameworks developed in the healthcare professions, guidance remains unclear and is inconsistently adhered to (perhaps in part due to a lack of organising frameworks), there is variability in methodological choices, inconsistently reported outputs, and a lack of evaluation of frameworks.

Methods: As such, we proposed the need for improved guidance. We outline a six-step model for developing competency framework that is designed to address some of these shortcomings.

Results: The six-steps comprise [1] identifying purpose, intended uses, scope, and stakeholders; [2] theoretically informed ways of identifying the contexts of complex, 'real-world' professional practice, which includes [3] aligned methods and means by which practice can be explored; [4] the identification and specification of competencies required for professional practice, [5] how to report the process and outputs of identifying such competencies, and [6] built-in strategies to continuously evaluate, update and maintain competency framework development processes and outputs.

Conclusion: The model synthesizes and organizes existing guidance and literature, and furthers this existing guidance by highlighting the need for a theoretically-informed approach to describing and exploring practice that is appropriate, as well as offering guidance for developers on reporting the development process and outputs, and planning for the ongoing maintenance of frameworks.

OFV 3-5

69182

A guidance statement for the reporting of Competency Framework Development in Healthcare Professions (CONFERD-HP)

Alan Batt Monash University, **Walter Tavares** University of Toronto, **Jessica Rich** Queen's University, **Tanya Horsley** The Royal College of Physicians and Surgeons, **Brett Williams** Monash University

Background/Purpose: Competency frameworks aim to provide an outline of the knowledge, skills, attitudes, and other characteristics required of healthcare professionals in order to competently enact professional practice. Despite the volume of competency frameworks developed, the reporting of the development process and subsequent outputs varies considerably, which leads to concerns regarding validity and rigour of outcomes

Methods: We developed the reporting guideline in four stages as recommended by the EQUATOR network: (a) project launch, (b) literature review, (c) e-Delphi survey, and (d) development of the guidance statements.

Results: An expert panel of 35 members suggested items for inclusion in the reporting guideline. The panel then subsequently voted on the essential items for inclusion in the final guidance statement from a synthesized list of 33 items.

Conclusion: The CONFERD-HP guidance statement can assist those developing competency frameworks in the development process, support journal editors and peer-reviewers when considering frameworks for publication, and help end-users to understand the scope, rigour, and trustworthiness of a competency framework, and inform decisions around its utility and validity for their purposes.

OFV 3-6

69396

What motivates the post-graduate medical trainee in seeking feedback?

Joanne Alfieri McGill, **Carlos Gomez-Garibello** McGill, **Maryam Wagner** McGill, **Linda Jones** University of Dundee, Centre for Medical Education

Background/Purpose: This study focuses on the post-graduate trainee during implementation of competency-based medical education (CBME). Based on social and organisational psychology theoretical models, using a goal-orientation theory framework, this study aims to explore how goal-orientation affects postgraduate medical trainees' feedback-seeking behaviour and preferences.

Methods: This sequential mixed methods study employs quantitative "profiling" of post-graduate trainees into categories based on a goal-orientation questionnaire, and then explores whether learner "profile" affects feedback-seeking behaviours through goal-orientation specific, semi-structured group interviews.

Results: 213 of 974 questionnaires were completed which identified 90 respondents having a preferred goal orientation; either Learn, Performance-Avoid (Avoid), or Performance-Prove (Prove). 4 Learn, 3 Avoid, and 3 Prove participants were interviewed. Responses were from a representative sample of post-graduate medical trainees. Five themes were identified: dominance of summative assessment or "judgement",

dependent learning, self-direction, goal-setting, and relationship or "trust".

Conclusion: Findings suggest that those who have a learning goal-orientation seem more likely to use goal-setting and self-directed learning strategies than those in either of the performance goal-orientation groups. Avoid and Prove learners were more likely to view feedback as judgements and be dependent learners. A conceptual framework was developed and highlights that regardless of goal-orientation, the teacher-learner relationship was paramount to feedback receptivity. In particular, trust in the dyad enables the learners to expose weaknesses leading to more effective feedback. These findings can help optimize the development of CBME feedback and assessment tools and may also have implications for resident workshops on self-assessment, goal-setting, and on the creation of faculty development workshops on giving feedback.

OFV 4: CME / CPD

Virtual 4

OFV 4-1

69207

Booster Sessions to Improve Cardiopulmonary Resuscitation Performance and Retention in Health Care Providers.

Pierre-Marc Dion University of Ottawa, **Richard Waldolf** University of Ottawa, **Chilombo Bould** University of Ottawa, **Agnes Crnic** University of Ottawa, **Graeme Mcbride** Canadian Armed Forces, **Sylvain Boet** University of Ottawa

Background/Purpose: The purpose of this study is to determine if a booster session improved resuscitation skill performance among health care providers (HCP) four months after a Basic Life Support (BLS) course and the optimal timing of such a session.

Methods: HCPs completed a BLS skills test following a BLS course. Each participant was randomized to one of three groups: early booster, late booster, or control. The early and late booster groups received a ten-minute booster session three weeks or eight weeks, respectively, after the initial BLS skills test. The control group did not receive a booster session. All participants completed the BLS retention test four months after the initial test. All tests were recorded on video and subsequently scored.

Results: A total of 86 participants completed the four-month process. Across the three groups, the mean retention test score was higher than the immediate post-test score (mean ±SE 9.26 ± 0.217 to 9.817 ± 0.202; p < 0.05). On average, time to compression decreased by 1.441 seconds (21.029 to 19.588 seconds) in the control group. In contrast, the average time to compression increased in the Early Booster by 2.304 seconds (17.957 to 20.261 seconds) and by 1.312 seconds (18.313 to 19.625 seconds) in the Late Booster. The average time to defibrillation increased by 7.637 seconds (p < 0.05) for all three groups in the retention test.

Conclusion: A booster session did not improve CPR performance among HCPs. However, BLS performance in all three groups improved after four months.

OFV 4-2

69621

Patient or Medication Safety Training: An Opportunity for Virtual Interactive Case System Innovation

Certina Ho University of Toronto, **Gordon Tait** University of Toronto, **Christy Mak** University of Toronto, **Amy Botross** University of Toronto, **Eulaine Ma** University of Toronto, **Wei Wei** University of Toronto, **Sonya Dhanjal** University of Waterloo, **Annie Yao** University of Toronto

Background/Purpose: Current literature on virtual cases illustrates increased student self-directed learning and satisfaction. Yet, the use of virtual cases has not been explored in the context of patient or medication safety. The Virtual Interactive Case (VIC) System allows educators to create online clinical reasoning scenarios with a bridge between theory and practice. We aimed to share our experience in the development and evaluation of three VIC teaching modules on patient or medication safety.

Summary of the Innovation: We created VIC training modules on medication incident disclosure, root cause analysis (RCA), and failure mode and effects analysis (FMEA). We piloted tested them during the COVID-19 pandemic. We administered a 16-item online questionnaire from May 22, 2020, to June 8, 2020, and obtained feedback from pharmacy students and practitioners in Ontario, Canada. Most of our 18 respondents had 1-5 years of practice experience. Their practice settings ranged from associations, academia, to community pharmacies and hospitals. Respondents found the VIC platform easy to navigate. They perceived the content to be relevant and easy to implement in patient care settings. Majority of them indicated that they were confident in carrying out incident disclosure, RCA, and FMEA at their practice settings.

Conclusion: The VIC System can be used to educate health profession students and practitioners on patient or medication safety. It is a safe and user-friendly platform to support patient safety in virtual care.

OFV 4-3

69199

Engaging patients with early signs of cardiovascular diseases in healthy aging interventions: An online education initiative for healthcare providers

Denise Stockley Queen's University, **Amber Hastings-Truelove** Queen's University, **Nancy Dalgarno** Queen's University, **Mohammad Auais** Queen's University, **Angela Coderre-Ball** Queen's University, **Vincent dePaul** Queen's University, **Catherine Donnelly** Queen's University, **Marcia Finlayson** Queen's University, **Setareh Ghahari** Queen's University, **Klodiana Kolomitro** Queen's University, **Trisha Lawson** Queen's University, **Britney Lester** Queen's University, **Diana Hopkins-Rosseel** Queen's University, **Eleftherios Soleas** Queen's University, **Jennifer Turnnidge** Queen's University, **Richard van Wylick** Queen's University, **Kevin Woo** Queen's University

Background/Purpose: As Canada's population ages, it is increasingly important for healthcare practitioners to find ways to engage patients in healthy aging programs and interventions. Our interdisciplinary team of health researchers and educators developed an evidence-based online program for educating healthcare providers on how to foster meaningful engagement of adults with early signs of cardiovascular disease in healthy aging interventions.

Methods: We completed a scoping review to identify facilitators and barriers to participation for older patients with cardiovascular disease. A survey of healthcare practitioners and subject matter experts identified education and resource gaps and learning needs for engaging this patient population.

Results: Seven themes emerged that described barriers and facilitators to increasing engagement in healthy aging interventions: 1) individual attitudes about illness and participation, 2) structure of healthcare organization (e.g., received referral to participate), 3) accessibility (e.g., transportation, time, cost), 4) social support, 5) knowledge of health programs, 6) demographics (e.g., age, gender), and 7) program variables (e.g., class sizes, supportive and knowledgeable staff). The survey found that healthcare practitioners were more comfortable discussing potential knowledge barriers with patients than accessibility or demographic barriers.

Conclusion: Based on the findings from our needs assessment, we developed an online learning module for healthcare practitioners which includes 1) An Introduction to Healthy Aging Initiatives, 2) Psychological and Physical Barriers and Facilitators, 3) Demographic Factors 4) Program Delivery and Accessibility-Related Barriers and Facilitators, 5) Motivation-Related Barriers and Facilitators, and 6) Characteristics of Effective Self-Management and Behaviour Change Interventions. The module can be accessed at https://healthsci.queensu.ca/sites/opdes/files/modules/Pfizer-Module-On-Health-Aging/#/.

OFV 4-4

69684

Exploring Mentorship Dynamics in Surgery: How people stick together.

Ghada Enani University of Toronto, **Marisa Louridas** University of Toronto, **Ryan Brydges** University of Toronto, **Helen MacRae** University of Toronto

Background/Purpose: Increasing evidence suggests that mentorship has a positive impact on physicians' success. Consequently, mentorship programs have been incorporated in many academic environments, albeit with variable success. To better understand the essential components of successful mentorship relationships, this study explored how mentors and mentees structure, navigate, and persist in their relationships in academic surgery.

Methods: We designed an interview-based study using a constructivist grounded theory approach to explore the dynamics of mentorship between junior and experienced surgeons. Recruited mentees were asked to nominate a senior surgeon they identified as a mentor. Both mentee and mentors were then interviewed separately. Transcripts were analyzed using constant comparison to generate themes and a final coding framework.

Results: We interviewed nine senior faculty mentors and 10 junior faculty mentees. Our analysis identified key themes describing how to initiate, maintain, and adapt a successful mentorship relationship. The mentorship process starts with finding a "good fit", persists through satisfying a reciprocal loop with timely communication, and deepens through appreciating cycles of success and mutual investment. Participants also discussed how to navigate through tensions to avoid relationship breakdown, by being open to constructive discussion, balancing formality and friendship, knowing when to transition a relationship to a new dynamic, and finding areas of realistic contribution.

Conclusion: We found that successful mentorship relationships are viewed as dynamic, and thusly require active investment and shared responsibility between mentees and mentors. Our results also emphasize the value of co-construction in the relationship, where cycles of mutual investment can result in mutual learning and growth.

OFV 4-5

69705

Promotions Primer: What We Learned After Five Years

Certina Ho University of Toronto, **Yifan Zhou** University of Toronto, **John Teshima** University of Toronto, **Sanjeev Sockalingam** University of Toronto

Background/Purpose: To provide guidance and support to faculty through the promotion application process, our Department of Psychiatry introduced the Promotions Primer (PP) in 2014. PP is offered annually as a half-day workshop, during which experienced faculty members provide general information, share tips and strategies, and past examples of faculty promotion dossiers. Our project is aimed to conduct the first five-year review of PP.

Methods: We retrieved the number of promotion applications and successful promotions between 2011 and 2019. We compared the number and percentage change of promotion applications and successful promotions, respectively, between 2011-2014 and 2016-2019 (i.e. four years pre- and four years post-PP), and excluded promotions data from the transition year of 2015. We also matched corresponding attendance data of PP in 2016-2019 with promotion applications and successful promotion data.

Results: We identified an overall increase of 2% in promotion applications, and an overall 4% increase in successful promotions from 2011-2014 (pre-PP) to 2016-2019 (post-PP). However, in 2016-2019, only 31% of promotion applicants had attended the PP and majority (i.e., 70%) of successful promotions were not PP attendees either.

Conclusion: An increase in number of faculty members over the years may contribute to the increasing number of promotion applications; and PP attendees might already have a vested interest in promotion applications. Hence, the absolute impact of PP on the number of promotion applications and successful promotions may be difficult to measure. Going forward, we will consider other aspects of program evaluation for our PP workshop.

OFV 4-6

69405

Evaluating virtual and in-person delivery methods in a quality improvement workshop for healthcare professionals.

Andrea Davila Cervantes University of Alberta, **Khalid Aziz** University of Alberta, **Karen Hunter** University of Alberta, **Roseanne Yeung** University of Alberta, **Nalini Singhal** University of Calgary

Background/Purpose: The Evidence-based Practice for Improving Quality (EPIQ) workshop uses social constructivist methodology to provide simulation-based training in quality improvement (QI) for healthcare team members. Traditionally delivered in-person, a virtual workshop was introduced in 2020 in response to COVID-19 restrictions. We evaluated participants' perceptions regarding content and delivery in both formats.

Summary of the Innovation: We conducted a retrospective mixed methods study of anonymous online workshop evaluations using an online survey tool (Qualtrics™) collected from July 2019 to February 2021. Participants were invited to answer 15 (Likert scale) questions on content and delivery, and 3 open questions using narrative. Participant QI experience and training and their professional roles were recorded. From EPIQ workshops (10 in-person and 9 virtual), 275 (59%) out of 466 participants completed evaluations. Multivariable analysis (MANCOVA) controlling for learner QI experience and expertise showed no significant differences for content or delivery between in-person and virtual workshop evaluations. Post hoc analysis suggested a small negative effect on teamwork in virtual workshops. Qualitative analysis identified three

themes: learning environment; knowledge content and delivery; and takeaway messages and actions.

Conclusion: The pandemic catalyzed a shift from in-person to online teaching and learning. EPIQ workshops, were equally acceptable in-person and virtually with respect to delivery and content. Qualitative feedback identified opportunities for improvement for both formats. The EPIQ social constructivist methodology, using team- and simulation-based QI training, was successfully delivered using either format. Further, blended learning modalities may also be considered to optimize team training in QI.

OFV 5: UGME / Teaching & Learning

Virtual 5

OFV 5-1

68850

Does anybody have a map? Mapping of pediatric undergraduate problem-based learning objectives

Devika Singh McMaster University, **Nina Mazze** McMaster University, **Jennifer Mackenzie** McMaster University, **Vicky Breakey** McMaster University

Background/Purpose: Problem-based learning (PBL) is a well-established teaching method in undergraduate medical education. Pediatric-focused PBL is associated with increased problem-solving and clinical reasoning in medical students. The pre-clerkship curriculum at McMaster University is built on PBL cases that include some pediatric cases. The purpose of this study was to map the PBL curriculum to the national pediatrics learning objectives. These objectives focus on pediatric clinical presentations based on the CanMEDS competency framework (https://www.pupdoc.ca/en/canuc-paeds).

Methods: All pediatric pre-clerkship PBL content (36/150 PBL cases) was identified within the curriculum. Key objectives are provided to students, who develop enabling objectives with the support of tutors who facilitate the sessions. These mandatory learning objectives were mapped to the canuc-paeds objectives.

Results: There were 15/29 canuc-paeds clinical presentations included in the PBL curriculum. Clinical presentations not included in the mandatory PBL learning objectives included core pediatric topics, such as: neonatal jaundice, rash, fever, abdominal pain and acute care topics such as altered level of consciousness and recognizing an acutely ill child.

Conclusion: Mapping PBL cases to the canuc-paeds clinical presentations provides valuable insight into the current state of the pre-clerkship content and identifies gaps in the curriculum. Opportunities exist to address gaps in the curriculum by renewing existing cases or developing new content. Additional educational initiatives can be developed to optimize the clerkship curriculum. The process can be generalized to other programs.

OFV 5-2

69460

Stethopedia©: An e-learning resource for medical students to supplement Canadian clinical skills education.

Gurinder Sandhu McMaster University, **Randi Mao** McMaster University, **Sophia Kerzner** McMaster University, **Shreyas Sreeraman** McMaster University, **Janhavi Patel** McMaster University, **Eva Liu** McMaster University, **Chad Singh** McMaster University, **Jason Profetto** McMaster University

Background/Purpose: During the COVID-19 pandemic, medical students have experienced altered or suspended clinical experiences, limiting opportunities to practice and learn crucial clinical skills. E-Learning is a powerful tool for supplementation of traditional pedagogical models in medical education. However, there are few Canadian-based resources that provide online clinical skills teaching. Our goal was to address the educational gap and supplement clinical skills learning with high quality videos that help medical students better prepare for Objective Structured Clinical Examinations (OSCEs) and clinical encounters.

Summary of the Innovation: Stethopedia is one of the first open-access websites created by medical students for medical students to supplement Canadian clinical skills curricula. The content is based on the McMaster Clinical Skills Guide and the Association of Faculties of Medicine of Canada Clinical Skills Document. This resource features OSCE-style physical examination videos, special examination videos for teaching difficult maneuvers (i.e., diaphragmatic excursion), and tutorials on interpreting radiological findings. Our website currently has 20 different instructional videos posted, with more in the production process.

Conclusion: Stethopedia has accumulated 9,175 views, with 2,533 unique visitors from 24 different countries. A satisfaction survey was disseminated to McMaster medical students from March 22, 2021 to April 24, 2021. The response rate was 17.5% (108/617). The large majority of respondents either agreed or strongly agreed that Stethopedia improved confidence, was a useful supplementary resource for clinical skills education, and that they would recommend Stethopedia to a colleague. Stethopedia is an innovative resource that can be used to improve confidence and competence of future medical professionals across Canada.

OFV 5-3

69655

Assessing Successful Mentor-mentee Relationships in Ophthalmology to Improve Mentorship Programs for Medical Students

Jobanpreet Dhillon McGill, **Andrew Meng** McGill, **Devinder Cheema** McGill

Background/Purpose: Mentorship underlies the professional and educational development of medical students. As each mentee-mentor relationship is unique, elucidating patterns of successful mentorships can be challenging. The current study aims to better understand the impact and key characteristics of mentor-mentee relationships in a surgical speciality, such as ophthalmology.

Methods: A questionnaire probing staff ophthalmologists' (mentors) and matched ophthalmology residents' (mentees) mentorship experiences during medical school was distributed to all Canadian ophthalmology programs between June 2020 and June 2021. Collected data was analyzed and reported as mean ± standard deviation where appropriate.

Results: The primary barriers to mentorship for both staff (n=28) and residents (n=17) included mentor (39.5±6.4%) time constraints, mentee (23.0±1.4%) time constraints, lack of staff/student interest in mentorship (7.5±2.1%). The most common means of initial mentor-mentee contact were through shadowing experiences (19%), via email (18%), and in-person meeting (17%). The medical year of initial mentor-mentee contact was highest in Med-2 (28%) and lowest in Med-4 (22%). While staff ophthalmologists preferred to meet in-person once every three months (35%), majority of residents met their mentors at least once a month (47%) during medical school. As assessed on a Likert scale (0-10), mentorship had a high impact on increasing mentees' interest in ophthalmology (8.5±1.1) and supported acceptance into residency program (8.5±1.7) according to the residents.

Conclusion: Mentorship programs for medical students may foster more successful mentor-mentee relationships by assessing realistic availability

of mentors and mentees, organizing early shadowing opportunities and in-person meet-and-greet events, and encouraging regular mentor-mentee follow-ups.

OFV 5-4

69696

Why radiology? Determining medical students' motivations for pursuing an undergraduate medical education radiology elective

Helena Bentley University of British Columbia, **Rebecca Spouge** University of British Columbia , **Cameron Hague** University of British Columbia, **Bruce Forster** University of British Columbia , **Savaas Nicolaou** University of British Columbia, **Kathryn Darras** University of British Columbia

Background/Purpose: The objectives of this study were to determine medical students' motivations for pursuing an undergraduate medical education (UME) radiology elective and to determine their perceptions of the most valuable aspects of the elective experience.

Methods: This was a cross-sectional, questionnaire-based study. Medical students who completed an UME radiology elective at a single academic institution during a 6-month period were eligible to participate. The online, anonymous questionnaire was adapted from student motivation theory. Students' perceptions were rated on a 5-point Likert scale and analyzed using descriptive statistics and bivariate analyses.

Results: The response rate was 50.0% (n=39/78). Less than half of participants (43.6%) reported consideration of the specialty as a leading career choice as their primary motivation. For imaging modalities, medical students reported that exposure to x-rays was the most valuable (4.7+/-0.6 (mean+/-SD)) while exposure to bone scans was the least valuable (2.9+/-1.06). For basic imaging principles, participants perceived an approach to imaging interpretation (4.6+/-0.7) and knowledge of contraindications to imaging (4.3+/-0.8) to be most of value. Medical students primary motivation did not statistically significantly impact the aforementioned responses (p <0.05).

Conclusion: Medical students' pursuit of UME radiology electives is not primarily motivated by a career in radiology. Medical students reported favouring the elective experience to be centred around broadly applicable basic imaging skills. This study serves as an evidence-based foundation to develop more learner-centered approaches to the UME radiology elective curriculum. In addition, it may serve as a framework for curriculum development for other UME electives.

OFV 5-5

69720

Evaluating the educational impact of medical student involvement in undergraduate medical education radiology curriculum content development

Helena Bentley University of British Columbia, **Dylan Meng** University of British Columbia, **Savvas Nicolaou** University of British Columbia, **Bruce Forster** University of British Columbia, **Kathryn Darras** University of British Columbia

Background/Purpose: Previous research from our institution suggests that our undergraduate medical education (UME) radiology curriculum benefits from medical student engagement and participation in content development. The aim of this study was to evaluate medical students' perspectives on their involvement in UME radiology curriculum content development.

Summary of the Innovation: Over a 24-month period 21 medical students at a single academic institution were involved in content development for the UME radiology curriculum. Involvement was both through structured,

credited completion of projects as part of the UME curriculum or extra-curricular and on a volunteer basis. Participation in content development for the UME radiology curriculum was variable but generally included the creation of educational content, primarily in the form of anatomy, ultrasound or clinical modules as well as lecture-based and case-based learning teaching files. A cross-sectional questionnaire based on engagement theory was developed to assess the impact of medical students' involvement on their learning. Medical students reported that participation in content development for the UME radiology curriculum increased their knowledge of anatomy and radiology as well as improved their approach to teaching.

Conclusion: Involvement of medical students in UME radiology curriculum content development is a viable evidence-informed means of active learning which has positive impacts on medical students' learning. This medical education innovation may be applied in other disciplines to enhance medical student engagement and learning.

OFV 5-6

69669

Using Mixed Methods to Develop, Implement, and Evaluate a Novel Learning Tool for Musculoskeletal Medicine

Kestrel McNeill McMaster University, **Devin Peterson** McMaster University, **Dianne Bryant** Western University, **Ranil Sonnadara** McMaster University

Background/Purpose: Musculoskeletal (MSK) instruction has been identified as being inadequate in undergraduate medical education around the world. Despite this recognized issue, little work has been done to reform Canadian medical schools' MSK curricula and identify solutions that are effective and resource efficient. To address this problem, we set out to develop, implement, and evaluate a novel self-directed learning tool for MSK medicine within the DeGroote School of Medicine's orthopedics rotation.

Summary of the Innovation: A program evaluation framework situated within a sequential exploratory mixed methods approach was used to develop this tool. Interpretive description assessed the strengths and weaknesses of the MSK curriculum, and a repeated measures design (n=140) involving MSK knowledge tests and a survey was then used to evaluate the efficacy of the learning tool. The learning tool was developed to target key areas elucidated in the curriculum evaluation, including common fractures and soft tissue injuries, red flags and emergencies, and pediatric MSK conditions. The tool is comprised of a collection of online modules and learning resources which were guided by the objectives outlined by the Bone and Joint Decade. The tool demonstrated success within the survey results, with over 90% of students indicating that the learning tool was an effective way of learning about MSK medicine. The repeated measures design revealed extremely poor (<90%) passing rates on knowledge tests pre-rotation which rose significantly (>80%) post-rotation.

Conclusion: This work outlines comprehensive methods for evaluating MSK curricula and provides a promising learner-informed tool for assisting students in learning about MSK medicine in clinical settings.

OFV 6: PGME

Virtual 6

OFV 6-1

69177

[Selection for Health Professions Education programs leads to decreased student diversity and increased inequality of opportunity, but lottery is no solution](#)

Lianne Mulder Amsterdam UMC, Research in Education, Faculty of Medicine, Vrije Universiteit, **Anouk Wouters** Amsterdam UMC, Research in Education, Faculty of Medicine, Vrije Universiteit, **Jan Hindrik Ravesloot** Amsterdam UMC, Faculty of Medicine, University of Amsterdam, **Jos W.R. Twisk** Amsterdam UMC, Department of Epidemiology and Data Science, Vrije Universiteit, Amsterdam, **Eddymurphy U. Akwiwu** Amsterdam UMC, Department of Epidemiology and Data Science, Vrije Universiteit, Amsterdam, **Andries S. Koster** Utrecht University, Department of Pharmaceutical Sciences, **Gerda Croiset** University Medical Center Groningen, Department of Education and Training, **Rashmi A. Kusurkar** Amsterdam UMC, Research in Education, Faculty of Medicine, Vrije Universiteit

Background/Purpose: Concerns exist about the role of selection in the lack of diversity in university health professions education (HPE). In The Netherlands, because of the gradual transition from weighted lottery to selection, we were able to investigate the variables associated with HPE admission, and whether the representativeness of HPE students has changed as a result of the introduction of selection procedures.

Methods: We designed a retrospective multi-cohort study using Statistics Netherlands microdata of all 16-year-olds on October 1st in 2008, 2012 and 2015 (age cohorts, N>600,000). We investigated whether they were eligible students for HPE programs (n>62,000), had applied (n>14,000), and were HPE students at age 19 (n>7,500). We used multivariable logistic regression to investigate which background variables were associated with becoming an HPE student.

Results: During hybrid lottery/selection (cohort-2008), applicants with at least one parent with a top-10% wealth level and women had higher odds of admission. During 100% selection (cohort-2015), these applicants continued to have higher odds. In addition, applicants with at least one healthcare professional parent had higher odds, and applicants with a migration background lower odds.

Conclusion: In a selection procedure, odds of admission are influenced by applicants' backgrounds. However, our data show that returning to lottery-based admission is not a solution to achieve a representative student population, due to the limited diversity of the applicant pool. Targeted recruitment and equitable admissions are therefore required to increase matriculation of underrepresented students. For that reason, we are currently investigating societal and institutional support for potential Widening Access policies and target groups.

OFV 6-2

69091

[Implementation and Evaluation of a Case-Based, Multimodal Approach to Deliver Training on Medical Assistance in Dying](#)

Natalie Tokatly Western University, **Jillian Lopes** McMaster University, **Ben McCutchen** McMaster University, **Robyn Fallen** McMaster University, **Sheila Harms** McMaster University, **Anita Acai** McMaster University, **Natasha Snelgrove** McMaster University

Background/Purpose: A longitudinal, resident-driven, case-based curriculum involving learners across all training cohorts was previously implemented at McMaster's Waterloo Regional Campus psychiatry program to facilitate small-group learning in a locally relevant and pedagogically rigorous way. Given its success, the main and regional campuses collaborated to use a similar approach to provide education on Medical Assistance in Dying (MAiD), a complex and ethically challenging topic not addressed by the current curriculum. The present study sought to evaluate this new curriculum.

Methods: Teaching sessions were delivered to psychiatry residents at McMaster University over four academic half-days. Pedagogical activities included panel discussions with community members, case-based discussions, small group discussions, and a mock OSCE. Evaluation of the curriculum occurred via a pre- and post-curriculum survey administered to all residents (n=30), faculty facilitators (n=3) and program leads (n=2).

Results: 28 residents and 5 faculty participated in the evaluation; 13 respondents (39%) provided both pre- and post-curriculum evaluation data. Resident and faculty attitudes towards MAiD were not found to differ significantly from pre- to post-curriculum (p's < .05). However, residents significantly increased their confidence, competence, and comfort regarding MAiD (p's > .05). The two faculty members who provided pre- and post-data showed consistent gains in all skills, as well as in competence and comfortability teaching about MAiD. Qualitatively, residents appreciated the active and learner-centred pedagogies, relevance, and effective facilitation.

Conclusion: The case-based, multimodal approach showed promise as a novel pedagogical approach to teaching about MAiD. Next steps involve exploring the facilitator experience in greater depth.

OFV 6-3

69331

[Hidden Curriculum of Bias Across Medical Disciplines: An Exploratory Validation of a Newly Developed Survey](#)

Karen Schultz Queen's University, **Nicholas Cofie** Queen's University, **Mala Joneja** Queen's University, **Shayna Watson** Queen's University, **John Drover** Queen's University, **Laura MacMillan-Jones** Queen's University, **Heather Braund** Queen's University, **Nancy Dalgarno** Queen's University

Background/Purpose: The phenomenon of the hidden curriculum (HC) appears to be a common feature of medical institutions, yet very few studies have empirically and comprehensively measured its scope and impact. A hidden curriculum has the potential to reinforce or undermine the values of an institution. We assessed the validity of a newly developed HC survey and make recommendations for future use and improvement.

Methods: In a random survey of medical students, residents, and faculty (n=470) conducted at Queen's University, we measured their experiences of the HC at the personal level, their perceptions of respect and disrespect for different disciplines, the settings in which the HC was experienced, the impact of the HC, their own actions, the efficacy of interventions, and the HC at the organizational level. Exploratory factor analysis and item response analysis were used to test the validity and reliability of the newly developed HC constructs.

Results: Overall validation statistics including factor loadings, variances explained, and reliability coefficients provided moderate to adequate measures to many of the HC constructs examined in relation to interactions between different areas of medicine and its impacts on learners and faculty. Reliability measures were as high as 0.93 and variances explained ranged from 52% to 93%.

Conclusion: More domains of the HC phenomenon exist than have been previously documented. The results validate some domains of the HC more than others in the current sample. Researchers can add other theoretically relevant measures to any of the constructs examined based on their unique goals, context, and scope of their research.

OFV 6-4

69707

[Clinician Scholar Program for Psychiatry Residents: What We Learned from the Literature and Similar Programs in North America](#)

Certina Ho University of Toronto, **Yifan Zhou** University of Toronto, **Christy Mak** University of Toronto, **Kathleen Sheehan** University of Toronto, **Sanjeev Sockalingam** University of Toronto, **Christina Truong** University of Toronto

Background/Purpose: The Department of Psychiatry is creating a Clinician Scholar Program (CSP) for psychiatry residents interested in pursuing careers in education scholarship, quality improvement (QI), and creative professional activities (CPA). Our project aims to provide recommendations to our Department with respect to curricular development, including scope, program length, enrollment, faculty capacity, and financial implications of the new CSP.

Methods: We conducted an environmental scan in July 2020 for existing similar programs within the Faculty of Medicine at our institution. Programs for medical residents relating to education scholarship and QI were included. A brief literature review was also performed to identify publications in 2015-2020 from institutions where similar programs were offered in North America.

Results: Based on the environmental scan, we recommended enrollment capacity in the first few years of the CSP to be a minimum of two residents per year, depending on departmental resources and faculty capacity in education scholarship, QI, and CPA. Lessons learned pertaining to curriculum development, program evaluation, and key recommendations from other similar programs reported in the literature will also be considered prior to the implementation of the CSP.

Conclusion: The CSP is expected to be operationally aligned with the Department's existing Clinician Scientist Program with respect to its program requirements, duration, selection process, on-boarding and off-boarding procedures, as well as the option for residents to enroll in a residency stream or a graduate stream of the program. The CSP will create a "home-base" for department members interested in scholarship broadly defined.

OFV 6-5

69481

[Virtual CaRMS Interviews: An Advance for Equity and Justice in Residency Application Process.](#)

Nicole Relke Queen's University, **Eleftherios Soleas** Queen's University, **Rosephine Del Fernandes** Queen's University, **Boris Zevin** Queen's University, **Janet Lui** Queen's University

Background/Purpose: The COVID-19 pandemic necessitated the rapid and mostly unplanned switch from in-person to virtual residency interviews. This creates opportunities to better align the Canadian Resident Matching Service (CaRMS) process with the values of equity, diversity, and inclusion (EDI). This study aims to explore the potential for virtual interviews to level the playing field for CaRMS interview applicants.

Methods: A cross-sectional survey of CaRMS R1 applicants (n=122) and selection committee members (n=400) from all Canadian English-speaking residency programs who participated in the 2021 match. Open-items were thematically analyzed, while closed-ended items were descriptively and inferentially analyzed, and organized into EDI themes.

Results: The findings point to virtual interviews being seen by applicants as more equitable as they are more easily reconciled with work/on-call schedules, result in fewer expenditures, save applicants' travel time, and allow applicants to apply and interview at more schools without the concern of travel expenses. Selection committee members viewed virtual interviews as comparable to in-person interviews in terms of quality, but noted that they missed the opportunity to interact informally with applicants. Offering a choice of interview format was not recommended because of the possibility of raising inequities between candidates and developing preferential bias towards in-person interviewees.

Conclusion: CaRMS selection committee members and applicants recognized that virtual interviews were aligned with values of EDI. Virtual interviews were credited with improved well-being for trainees, and were shown to have substantial upsides, with fewer downsides than in-person interviews, thus prompting the notion that perhaps they should become the norm.

OFV 6-6

69712

[Clinician Scholar Program: Need Assessment Focus Groups with Psychiatry Residents and Faculty](#)

Certina Ho University of Toronto, **Christina Truong** University of Toronto, **Kathleen Sheehan** University of Toronto, **Sanjeev Sockalingam** University of Toronto, **Sara Dawood** University of Toronto

Background/Purpose: The newly developed Clinician Scholar Program (CSP) at the Department of Psychiatry supports and enhances the training of psychiatry residents interested in pursuing academic careers in education scholarship, quality improvement (QI), and other creative professional activities (CPA). Our project aims to identify seminar topics and key considerations in curriculum development of the CSP to support education and training of residents interested in these fields.

Methods: We conducted three virtual need assessment focus groups with a total of 10 senior psychiatry residents, junior and senior faculty members within and beyond the Department of Psychiatry. We asked about their perceived learning needs of psychiatry residents who are interested in education scholarship, QI, and CPA. Two independent reviewers performed thematic analyses of the focus group transcripts and summarized the key findings.

Results: Recommendations for CSP seminars included grant-writing workshop, ethics board approval, time management, and opportunities for residents to present their projects. Creating a community of practice where residents can learn about career trajectory, network with colleagues and mentors was also suggested. Focus group participants emphasized the importance of parity between this new program and the Department's Clinician Scientist Program in terms of funding allocation and departmental support.

Conclusion: This project provided an insight on psychiatry residents' and faculty members' perception of curricular needs and support for residents in the new CSP. The CSP seminar topics are expected to best support education and training of psychiatry residents interested in education scholarship, QI, and CPA.

OFV 7: EDI

Virtual 7

OFV 7-1

69339

Sex-based disparities in Twitter influence in academic medicine

Alexandra Istl Johns Hopkins University, **Subhrata Verma** Western University, **Natasha Jawa** Queen's University, **Robin Mackin** Western University, **Natashia Seemann** Western University, **Amrit Kirpalani** Western University

Background/Purpose: To identify studies exploring demographic disparities in Twitter influence in academic medicine and gaps in this body of literature.

Methods: We conducted a literature search and scoping review to identify publications exploring Twitter influence in academic medicine. Included studies evaluated Twitter influence by any metric and reported associated demographic characteristics. There were no date or language restrictions. We completed abstract and full text reviews in duplicate. Percent agreement and κ statistic were calculated at each stage. Abstracted data points included metrics used to assess influence, influencer demographics, and methods of influencer identification.

Results: From 1654 records, thirteen met inclusion criteria. Seven were from surgical and radiation oncology disciplines. Influence was variably defined based on followers, engagement, measures of centrality, or third-party software. With respect to sex, multiple studies identified fewer female influencers across professional ranks, although two identified more female influencers among trainee populations. Female users were also less likely to develop Twitter influence at academic meetings, despite equal/greater representation at these meetings. Level of professorship was positively associated with Twitter influence. Associations between Twitter influence and publication number or h-index varied considerably. No studies explored race or ethnicity in relation to Twitter influence, which represents a significant gap in the literature.

Conclusion: The current body of literature suggests Twitter influencers in academic medicine are disproportionately male. Female users' digital footprint may have poorer reach than males. No studies examined racial or ethnic disparities in Twitter influence. This highlights the need for studies evaluating how social media may perpetuate disparities in academic medicine.

OFV 7-2

69484

CPD Diversity Audit: Tracking and Reflecting on CPD Decisions for Advancing Justice

Eleftherios Soleas Queen's University, **Tiffany Mak** Queen's University, **Jenny Debruyn** Queen's University, **Kate Kittner** Queen's University, **Katherine Evans** Queen's University, **Richard van Wylick** Queen's University

Background/Purpose: Representation matters in learning. This is true also in CPD where who is chosen to present reflects who is seen as knowledgeable and spotlighted. At Queen's, the advancement of justice through equity, diversity, inclusion is a priority.

Summary of the Innovation: We decided to put our money where our mouth is and see what a years' worth of effort in deliberately seeking representative planning committees in profession, racialized, and other equity-deserving groups would do for the representativeness and contextual representativeness of the CPD that our office produced. We integrated resources such as Visual Dx as well as enhanced guidelines for speakers approved by our planning committees which prompted for more representativeness in the creation of educational materials such as slides, quizzes, modules, and pictorial representations of signs, symptoms, and patients. We retrospectively performed a content analysis of our 2019 and 2020 CPD offerings to see the extent that our planning committees and educational materials in our programs reflected the diversity of Canadian healthcare.

Conclusion: We present descriptive statistics that show that within a year of implementing these relatively low-cost processes we were able to make our CPD offerings significantly more diverse in terms of interprofessional scope, minority representation on committees, and representativeness in program content. It is clear that the sustained effort has a direct outcome on the durability of gains. It is incumbent on CPD offices to make precedent-setting additions to their processes such that inclusion becomes inborne in the processes of development, accreditation/certification, and implementation of CPD.

OFV 7-3

68796

Immigrant International Medical Graduates: How do they successfully manage complex sociocultural challenges?

Azaria Marthyman University of British Columbia, **Laura Nimmon** University of British Columbia

Background/Purpose: Immigrant international medical graduates (I-IMGs) face significant sociocultural challenges that can impact their success. Conceptual understandings underpinning the complex processes of how I-IMGs effectively manage sociocultural challenges is relatively sparse. Not surprisingly, many medical training programs struggle to provide robust supports as they lack frameworks to assist I-IMGs in managing sociocultural challenges. In addressing this theory-knowledge gap, this study explored how I-IMGs successfully manage sociocultural differences.

Methods: In this qualitative study, we interviewed eleven immigrant trainees from diverse backgrounds who are in training or recently trained in a distributed multi-site postgraduate medical training program in Canada. Employing sociocultural learning theory, we gained insights into the processes of how I-IMGs conceptualize and successfully manage sociocultural challenges.

Results: The following themes encapsulate the salient processes for how I-IMGs conceptualize and successfully manage sociocultural challenges: 1) successfully navigating transitions; 2) resisting or altering elements of prior sociocultural norms while embracing the new; 3) living and being in community and having supportive social networks; 4) risk taking to self-advocate and actively seek help.

Conclusion: Understanding these complex social processes and how they interlace has implications for medical educators and institutional policies. These insights are critical to consider if we wish to embed robust and sustained supports within our I-IMG training programs.

OFV 7-4

69440

Bridging the gap between theory and practice: exploring anti-racism and anti-oppression in medical education

Gopika Punchhi Western University, **Kathryn Shum** Western University, **Javeed Sukhera** Chair/Chief, Department of Psychiatry, Hartford Hospital

Background/Purpose: Adoption of anti-racist and anti-oppressive pedagogy in medical education is necessary to address individual, institutional, and systemic inequities. However, there is limited research into the practical implementation of such approaches, as well as

challenges and barriers to implementation. This study sought to explore how to bridge the gap between the theory and practice of anti-racist and anti-oppressive pedagogy within medical education.

Methods: Using constructivist grounded theory, we conducted 19 semi-structured, one-on-one qualitative interviews with medical students, residents, and faculty at medical schools in Canada. We iteratively analyzed transcripts through line-by-line coding, focused, and axial coding.

Results: Findings suggest that most approaches to anti-racist and anti-oppressive teaching and learning are fundamentally misaligned with the values, priorities, pace, biomedical focus, and hierarchical nature of medical education and the field of medicine. Although there are some intrinsic and extrinsic identity-related motivators for individuals to engage in learning about and practicing these frameworks, multi-level structural and cultural changes within medicine are required to translate anti-racist and anti-oppressive pedagogy from theory to practice. Participants noted that a shift to community-based models of education with attention to adequate compensation and addressing resistance are key ingredients for success.

Conclusion: Although advancements have been made, approaches to anti-racist and anti-oppressive pedagogy are not currently aligned with the nature of medical education and medical practice. Integrating such approaches will require individual and institutional reflection on the values and assumptions that underpin the field before progress can be made in a meaningful and sustainable way.

OFV 7-5

69500

Physiotherapy curricula and Indigenous Peoples: an exploration of curricular development processes within Canadian physiotherapy programs

Moni Fricke, (BMR)PT, PhD University of Manitoba, **Dan Henhawk, PhD** University of Manitoba, **Aliki Thomas, PhD, OT(c), erg** McGill, **Lisa M. E. Arcobelli, PT, Bsc PT, Msc** Not affiliated with any institution at the time of abstract submission

Background/Purpose: In recent years, universities across Canada have been striving to improve engagement with Indigenous knowledges and Indigenous Peoples, including through curriculum development. Within the profession of physiotherapy, there is an absence of national guidance on such processes of curricular development, and as such, little is known about the curricular development processes currently taking place in Canadian physiotherapy programs. This study aimed to explore how Canadian physiotherapy curricula are changing in relation to Indigenous Peoples and their communities.

Methods: One faculty member from each of the 15 Canadian physiotherapy programs was invited to participate in a questionnaire-based interview with closed-ended questions exploring curricular content and open-ended questions exploring curricular development processes, including barriers, facilitators, and drivers of such curricular development. This presentation shares the data obtained through the open-ended questions, which were analysed using thematic analysis.

Results: Fourteen of the 15 Canadian physiotherapy programs were represented. The data were organised into five themes: (1) An Indigenous Worldview is Key; (2) Universities are Putting Supports in Place; (3) Processes are Complex and Challenging; (4) Faculty Members have Learning Needs; and (5) Drivers for Change.

Conclusion: This exploratory study provides a broad overview of a complex process of curricular change that is occurring within Canadian physiotherapy programs today, signposting the need for more in-depth

research in several areas, such as the role of Indigenous and non-Indigenous persons in curricular development, faculty member perceptions and learning needs, and the ways in which systems of oppression operate and may be challenged within curricular development processes.

OFV 7-6

69686

Supporting Students Requiring Accommodations in Fieldwork Education: Perspectives of Academic Coordinators in Canadian Occupational Therapy Programs

Tal Jarus University of British Columbia, **Fernanda Mira** University of British Columbia, **Yael Mayer** University of British Columbia, **Shahbano Zaman** University of British Columbia

Background/Purpose: While research on the challenges faced by postsecondary students requiring accommodations (SRA) in fieldwork education exists, little empirical attention has been given to the experiences of academic coordinators (AC) supporting these students in their programs. ACs have a unique perspective on implementing students' accommodations in fieldwork. This study explored the perspectives of ACs in Canadian occupational therapy (OT) programs regarding their practices to support SRA in fieldwork and the difficulties they encountered in doing so.

Methods: A sequential mixed-methods design was employed. Data was collected from 15 OT ACs using a survey questionnaire followed by semi-structured interviews with 5 of the survey respondents. The qualitative data from the interviews was triangulated with the quantitative data from the questionnaires and analyzed.

Results: Participants' experiences presented two themes: 1) ACs' constantly navigated ambiguities and tensions in fieldwork and 2) ACs manage accommodations in ever-changing human dynamics. Results revealed that the ACs faced complex barriers in providing SRA with the support they need to succeed in fieldwork including insufficient institutional and community resources. Collaborative practices enabled the ACs to overcome some of these barriers.

Conclusion: Results indicate the need for cross-departmental and multi-university AC collaboration practices to support SRA. ACs in OT programs are licensed occupational therapists with unique expertise in creating universal supports. Their perspective can inform universities seeking to offer equitable opportunities to all students in healthcare programs. The results will be discussed from the perspective of the UN human rights-based principles for equality and inclusion in postsecondary education.

OFV 8: COVID

OFV 8-1

69357

Assessment of medical students wellbeing during the COVID-19 pandemic

Kay-Anne Haykal University of Ottawa

Background/Purpose: The emergence of the COVID-19 pandemic presents an unprecedented challenge to mental health and wellbeing. Many medical students are grappling with great upheavals and facing several challenges in their education and on their career development planning. The impact and the consequences of the COVID-19 on medical students needs to be clearly documented and addressed.

Methods: A survey of 88 questions on physical and mental health was administered in May 2020 at the Faculty of Medicine of the University of Ottawa in order to assess the appropriate supports. The respondents represent 563 medical students from the first to the fourth year of their

studies at the Faculty of Medicine of the University of Ottawa's undergraduate medical program. The survey looked at 8 domains of wellness.

Results: The results indicated that 16.8% of respondents believe COVID-19 has affected their mental health. Additionally, 48.8% said that their overall stress level has increased. 40.3% of students are worried about the impact of the pandemic on their medical education. This suggest that the mental health of medical students and the impact of the pandemic on their career plans need to be closely monitored.

Conclusion: Many strategies are already in place to support mental health and provide career advising to medical students. In light of the COVID-19 pandemic and the changes in the delivery of the curriculum as well as the changes to the clinical experience, students' needs must be taken into consideration. The development of additional resources should be tailored to the unique needs of students.

OFV 8-2

69197

Teaching Skills Development Online: Project Echo Ontario Skin and Wound Care Adapting to Covid-19

Eleftherios Soleas Queen's University, **R. Gary Sibbald** University of Toronto, **Amber Hastings-Truelove** Queen's University, **James Elliott** WoundPedia, **Nancy Dalgarno** Queen's University, **Reneeka Jaimangal** WoundPedia, **Angela Coderre-Ball** Queen's University, **Shannon Hill** Queen's University, **Nicholas Cofie** Queen's University, **Richard van Wylick** Queen's University, **Karen Smith** Queen's University

Background/Purpose: Project ECHO Ontario Skin and Wound Care (SWC) is an innovative interprofessional online educational model that provides remote practitioners access to experts from across Ontario. A 2-day in-person skills bootcamp had to be redeveloped in an online format because of COVID-19 restrictions. The bootcamp assessments provided constructive, practical, and actionable feedback that allowed participants to further develop their SWC skills.

Methods: A series of 9 professionally facilitated, edited and peer reviewed demonstration videos focused on different skill domains and learning outcomes were utilized in the ECHO SWC bootcamp (n=80). Participants watched the videos until they felt confident performing the skills. They used infrared thermometers, wound care supplies and instructional materials delivered to them by mail to video record themselves applying the skills on volunteers. A team of 11 healthcare SWC experts reviewed the videos and assessed participant performance using a rubric developed by the ECHO SWC team. The bootcamp was evaluated through a pre-post survey. Two-tailed t-tests were used to examine significant differences in domains of knowledge examined before and after training.

Results: There was a statistically significant increase in 26 of 27 knowledge domains examined for participants' self-perceived knowledge from pre-to post-test. Participants met or exceeded standards (rated proficient or adequate by reviewers) on 17 of 21 rubric assessment domains.

Conclusion: The virtual ECHO SWC bootcamp was an effective way to provide hands-on skills training for participants as an alternative to in-person training. This is a highly successful interprofessional program for educating healthcare professionals during the pandemic.

OFV 8-3

69325

Adoption of telehealth by clinical teachers, supervisors and clinical practitioners at McGill University and teaching hospitals: a needs assessment

Francesca Luconi McGill, **Leonora Lalla** McGill, **Gareth Mercer** McGill, **Leonard Levin** McGill, **Catherine Jarvis** McGill, **Mylene Arsenault** McGill, **Michelle Elizov** McGill, **Beatrice Lauzon** McGill

Background/Purpose: Telehealth technology was present in healthcare delivery prior to the Covid-19 pandemic, however its use by physicians has greatly increased as a result in clinical practice, teaching and supervision of residents. This study aimed to investigate the perceived barriers and enablers to telehealth and to identify needs at the individual, organizational and systemic levels.

Methods: This cross-sectional study collected data via an online survey targeting physicians and residents affiliated with McGill University and teaching hospitals (convenience sampling). The survey covered 48 MCQs and 3 free text questions focused on the roles of clinical teacher, clinical supervisor and clinical practitioner. Descriptive statistics and inductive-deductive thematic analysis were conducted.

Results: N=250 completed the survey (May-June 2021). Slightly more than half of the sample (53.2%) were family physicians, while 44.8% were other specialists, of which psychiatrists were the most represented (10.2%). 84% completed the questionnaire in English. The most frequently reported role was clinical practitioner (64.8%). Before March 2020, only 10.1% frequently used telehealth for patient care, whereas after this increased to 88.3%. Major barriers to the use of telehealth in clinical practice included limited patient access to technical support services (28.3%), limited computer literacy (patient and/or clinician) and lack of technical devices (patient and/or clinician). Participants felt that telehealth was 'timely', safe', and 'patient-centered' (71.9%, and 62.5%, 62.5%, respectively).

Conclusion: Clinicians' use of telehealth for patient care has greatly increased because of the Covid-19 pandemic, however important barriers remain. Identified needs might trigger change at multiple levels.

OFV 8-4

68843

Adaptation of a Skills Workshop: Development and Evaluation of an Online Diabetic Foot Examination for CPD/CME

Helen Mawdsley University of Manitoba, **Christine Polimeni** University of Manitoba, **Jane McSwiggan** Winnipeg Regional Health Authority, **Ana Mullen** University of Manitoba, **Rhonda Heintz** Concordia Hospital, Winnipeg, **Tara Schmitz-Forsyth** Riverview Health Centre and Health Sciences Centre, **Lori McKenzie** Manitoba Renal Program, Seven Oaks General Hospital, **Brett Finney** Portage Clinic

Background/Purpose: The COVID-19 pandemic required CPD/CME lecture-based programming to shift to an online platform. However, the delivery of hands-on skills-based small group learning in an online format provided additional challenges to meet the required standards. The CPD-Medicine unit at the University of Manitoba met this challenge by adapting a classroom-based course hands-on, skills workshop focusing on examination of the diabetic foot to an online format.

Summary of the Innovation: 14 participants, spanning rural and urban areas, and 5 facilitators (1 physician, 3 nurses, and 1 OT) participated in a two-hour CPD session via Zoom, supported by the CPD-Medicine unit. The participants received a kit with educational and testing materials, and were required to have a standardized patient from their household. After a brief lecture and demonstration of the required skill, small group

sessions were created using breakout rooms with 2 participants and a facilitator in each room. The participants demonstrated the skill on their standardized patient, and were provided with real-time feedback from both the facilitator and their peers. On evaluation, 9 out of 10 participants who completed the evaluation confirmed that the personal feedback received promoted an objective improvement in skills.

Conclusion: The incorporation of a standardized patient from the participant's household is an accessible and inexpensive strategy to offer a hands-on skills-based workshop during a global pandemic. While initially developed to align with local public health restrictions, this format has merit in overcoming geographical barriers to CPD/CME, and allows other hands-on skills workshops to be considered for format.

OFV 8-5

69196

Project Echo Ontario Skin and Wound: An Effective Model for Teaching Interprofessional Education in Skin and Wound Care

Amber Hastings-Truelove Queen's University, **R. Gary Sibbald** University of Toronto, **Eleftherios Soleas** Queen's University, **James Elliott** WoundPedia, **Nancy Dalgarno** Queen's University, **Reneeka Jaimangal** WoundPedia, **Angela Coderre-Ball** Queen's University, **Shannon Hill** Queen's University, **Nicholas Cofie** Queen's University, **Richard van Wylick** Queen's University, **Karen Smith** Queen's University

Background/Purpose: Project ECHO Ontario Skin and Wound Care (SWC) hosts a learning community for healthcare providers interested in further developing their knowledge and skills in SWC. The learning model features synchronous online sessions with deidentified patient case discussions. Community providers and specialists learn with and from each other, acquire knowledge and skills, increase competency, and foster a community of practice. In the first two years, this program has impacted 441 healthcare providers from 25 professions.

Methods: The program consisted of eight sessions in each cycle (1 & 2) for three cohorts (48 sessions total). The program evaluation for each cohort consisted of pre and post ECHO program and post individual session surveys (n=224) that included up to 22 knowledge domains. Quantitatively, a two-tailed t-test was used to assess significant increases in participants' perceived knowledge and confidence levels with identified learning objectives. A content analysis was applied to the qualitative data in NVivo using a thematic approach.

Results: There was a statistically significant increase in 18 of 22 domains of knowledge for all sessions, and a statistically significant increase in participants' overall perceived comfort (t=-5.23, p=0.000). Participants indicated that the key strengths of the program sessions included knowledgeable facilitators, evidence-based information, interprofessional collaboration, and topic diversity. Overall weaknesses included internet difficulties, physician-focused topics, timing, and scheduling.

Conclusion: Project ECHO SWC model improved self-efficacy of interprofessional healthcare providers. This innovative model was very effective during the pandemic due to its virtual platform that enhanced interprofessional collaboration, knowledge, and skills development.

OFV 8-6

69571

Identifying and addressing intersecting barriers of gender, sex and race to academic productivity in Canadian Faculties of Medicine during the COVID-19 pandemic.

Sophie Soklaridis Centre of Addiction and Mental Health, **Georgia Black** The Centre for Addiction and Mental Health, **Christine Chambers** Dalhousie University, **Constance LeBlanc** Dalhousie University, **Anna McLeod** Dalhousie University, **M. Natasha Rajah** McGill, **Heather Ross** Peter Munk Cardiac Centre, **Brett Schrewe** University of British Columbia, **Fiona Clement** University of Calgary, **Jayna Holroyd-Leduc** University of Calgary, **Valerie Taylor** University of Calgary, **Patricia Houston** University of Toronto, **Ayelet Kuper** University of Toronto, **Vicky Stergiopoulos** University of Toronto, **Kinnon MacKinnon** York University, **Sophie Soklaridis** University of Toronto

Background/Purpose: The COVID-19 pandemic has presented new barriers and exacerbated existing inequities for physician scholars. The first wave of literature exploring the impact of the pandemic on scholars' academic productivity appeared to center on women. However, there may be additional challenges for scholars who hold intersecting identities across racialized, gender minority, sexual minority, and disability groups. To explore this further, we conducted a rapid scoping review to examine the current literature in this area through an intersectional lens.

Methods: Working with a research librarian, we conducted a search of peer-reviewed literature published from March 1st,2020 to June 25, 2021 in Ovid MEDLINE, Embase and PubMed (non- medline citations only). Three reviewers completed the final screening and abstraction using Covidence software.

Results: After removing duplicates, 4979 papers were identified for screening, with 32 papers progressing to the final abstraction phase. The majority of papers included in the final abstraction phase focused exclusively on the impact experienced by women physician scholars (81%). As such, the vast majority of recommendations focused on alleviating the burden on women and mother scientists, without consideration of intersecting identities of physician scholars.

Conclusion: Findings from this scoping review indicate a lack of discourse around the impact of the pandemic on physician scholars who hold intersecting identities. As such, measures implemented by academic medical centers to reduce the impact on scholars may inadvertently reproduce inequities. We discuss research avenues that may offer further insight into the impact of the pandemic on underrepresented physicians and their scholarly work

Workshops

Glen 205 - CTCC

WA-1- 68791

How to engage learners from an interprofessional primary care audience? Best practices and challenges from Project ECHO at UHN, a virtual CME program

Jane Zhao University Health Network, **John Flannery** University of Toronto

Rationale/Background: Engaging learners from an interprofessional primary care is difficult for many reasons: diverse professional backgrounds, varying levels of training, competing clinical interests, and ongoing workplace pressure. Given our current COVID-19 pandemic, the need for virtual care and education is evermore critical. Extension for Community Healthcare Outcomes (ECHO) is a unique Continuing Medical Education (CME) program that enables primary care audiences to learn across videoconferencing platforms using adult learning principles with content experts facilitating sessions. Leveraging videoconferencing technology, each ECHO session includes a short didactic presentation followed by a real patient case presented by a community primary care provider. Feedback on ECHO sessions has been overwhelmingly positive, with providers reporting higher rates of self-efficacy and knowledge, as well as increased capacity for patient case management. How does this occur? Components of ECHO sessions have been developed through continuous quality improvement. In this workshop, we will outline Malcolm Knowles' Adult Learning Principles and share best practices and challenges from teaching learners in an interprofessional primary care audience, particularly around skilled facilitation. The facilitation process leads to accurate diagnosis and treatment recommendations created by the learners and facilitators. Skilled facilitators guide case discussions, meeting learner's needs in a safe environment.

Instructional Methods: We plan to tailor this workshop for the CCME audience by using structured and interactive questioning, a short slide deck with polling questions, and short recorded video segments from our CME sessions. Using the video segments as examples of best practices and challenges, we use this video analysis exercise to help participants recognize the specifics of challenging educational encounters and articulate these with the group. The exercise will also take the audience through a worksheet and planning for their respective CME programs. We aim to engage audience members in thoughtful, deliberate discussion that will model best practice learnings and awareness of challenges.

Target Audience: Our workshop is open to all, as there are no prerequisites for the content. However, our workshop will be most useful for healthcare providers, administrators, organizers, and educators who are running their own CME programs and who may play a leadership role in facilitating the sessions.

Learning Objective: 1. To describe adult learning principles and how they are applied in the ECHO model; 2. To identify best practices and challenges from Project ECHO at UHN regarding learner engagement and online facilitation.

Glen 206 - CTCC

WA-2-69668

Tuning In to Interprofessional Healthcare: a new interprofessional education experience in collaborative classical music.

Willem Blois Dalhousie University, **Julia LeBlanc** Dalhousie University

Rationale/Background: While Interprofessional Education (IPE) is a relatively new buzzword in medical education, disciplines outside the health professions have long explored the theory and real-life practice of interprofessional collaboration[1]. In a new and innovative IPE mini-course through Dalhousie Medical School, we engage professional classical music ensembles in the community to teach communication, team functioning and conflict resolution to health professions students. The first iteration of this course took place in March 2019 and paired a professional classical string quartet with healthcare students from various disciplines. After a successful debut, participant reflections described the value gained from full immersion in a musical ensemble while observing and engaging with professional collaborators to learn what successful collaboration looks like, sounds like, and feels like. Co-presenters and resident physicians Julia LeBlanc and Willem Blois bring training and expertise as classical musicians to the forefront in a dynamic workshop providing new insight into interprofessional education.

Instructional Methods: Musical demonstrations by co-presenters (piano & violin) are paired with guided interactive activities for participants - these demonstrations explore the verbal and non-verbal communication employed by musicians to navigate conflict. Participants, divided into groups, then engage each other through improvisational exercises exploring communication and conflict resolution. Discussion after each activity aims to highlight strategies used in overcoming points of conflict and consider how these strategies are influenced by the collaborative practices of classical musicians.

Target Audience: Health educators seeking novel training experiences through arts-based education and learners at all stages of training interested in discussing/analyzing interprofessional communication using the arts as a reflective tool.

Learning Objective: Interpret the following quote as it pertains to your clinical practice: "Although medicine is inarguably a learned profession, clinical practice is above all a matter of performance."[2] Apply communication skills exhibited in collaborative music performance to interprofessional clinical scenarios.

Glen 208 - CTCC

WA-3- 68550

Fundraising basics for Educators

Alireza Jalali University of Ottawa, **Jacline Nyman** University of Ottawa

Rationale/Background: This is a time of economic and political challenges in higher education. Universities face increasing threats to their business models; they rely more than ever on fundraising dollars. The purpose of this workshop is to raise awareness about Fundraising's role in medical education and to reflect on strategies that can be used to ensure the successful application of fundraising in an academic environment.

Instructional Methods: This interactive workshop will include three parts: • Part one: 0-0h30 Fundraising experts will give short presentations on basic fundraising principles in higher education and how these can be used and benefit medical educators. • Part two: 0h30-1h Attendees will be divided into small groups to work on real-life fundraising cases in Education, Research, and Clinical setting. The Fundraising experts will be circulating and facilitating the groups' discussions. • Part Three: 1h-1h30 Each group will present their Fundraising solution and ideas for general discussion.

Target Audience: Medical educators, clinicians, leaders, faculty administrators, and students

Learning Objective: Upon completion of this session, attendees will be able to: · define the basics of fundraising and the role of medical educators in forming relationships with potential donors and past alumni and discuss philanthropic trends in higher education

Glen 209 - CTCC

WA-4-69028

[The 4C's of Influence: Innovations in Teaching Leadership Development across the Medical Education Continuum](#)

Nabil Sultan Western University, **Victor Do** University of Toronto, **Lyn Sonnenberg** University of Alberta, **Jerry Maniate** University of Ottawa

Rationale/Background: Leadership development is recognized as part of the skillset physicians need to develop. Competence, Character, Connection and Culture are critical for effective influence and leadership in medicine. Our framework, "The 4C's of Influence", focuses on integrating these dimensions across the medical education continuum. As leadership requires foundational skills and knowledge, a leader must be competent to exert positive influence. Character Based Leadership stresses development of, and commitment to, values and principles, in the face of everyday situational pressures. If competence confers the ability to do the right thing, character is the will to do it consistently. Next, leaders must build relationships, fostering connection. Building coalitions with extensive and diverse networks ensure different perspectives are integrated and valued. Connected leadership involves inspiration, authenticity, collaboration and fostering engagement. To create a thriving, health promoting learning environment, culture will hold everything together. We use a variety of pedagogical methods to implement a comprehensive adaptable curriculum.

Instructional Methods: We will present the framework in an engaging lecture format. (15 min) We will review an interactive case study that utilizes our framework to address a challenging clinical scenario (15 min) Small groups guiding attendees through initial steps to integrate concepts into curriculum. (60 min)

Target Audience: This is an introductory workshop for learners and educators across the learning continuum who are interested in leadership development

Learning Objective: Describe the 4C's of Influence in Medical Education Framework along with their relationship to effective influence and leadership List various approaches to support the implementation of the 4C's of Influence across the training spectrum

Virtual 5

WAV-5 - 68961

[Inter-institutional data-driven medical education research in Canada. Considering research directions in light of salient risks, shared values, and best practice recommendations.](#)

Lawrence Grierson McMaster University, **Kulamakan Kulasegaram** University of Toronto

Rationale/Background: Recently, Canadian medical education stakeholders and data stewards participated in a project aimed at building consensus on the ethical use of inter-institutional education data for research. This project included a 5-part knowledge synthesis series, which was augmented by pre- and post-event consultations with representatives of physician training, physician licensure, physician certification, physician regulation, training program accreditation, and physician and physician-in-training advocacy organizations involved in the medical professional development trajectory. Through consideration of benefits and risks, the project resulted in agreement about shared values and a set of best practice recommendations.

Instructional Methods: The workshop will overview the project, highlighting its process and outcomes. Through facilitated discussion, smaller break-out sessions, and reflection on key literature, participants will have an opportunity to engage in dialogue about operationalizing

research within this agreement, promoting uptake, and the potential for new collaborations.

Target Audience: Scientists, leaders, and data custodians of Canadian medical education.

Learning Objective: By the end of this workshop, participants will be able to: 1. Understand the process by which a consensus agreement for inter-institutional data-driven medical education research was developed. 2. Articulate the shared values that medical education stakeholders and data stewards in Canada believe are fundamental to ethical conduct of inter-institutional data-driven medical education research. 3. Develop research approaches that are consistent with best practice recommendations. 4. Recognize others interested in inter-institutional data-driven research collaboration.

Virtual 6

WAV-6- 69154

[Transformation in Health Professions Education programmes: Challenges, Needs and Opportunities](#)

Diane van Staden University of KwaZulu-Natal, **Saul Cobbing** University of KwaZulu-Natal, **Zandile Shezi** University of KwaZulu-Natal, **Alvin Munsamy** University of KwaZulu-Natal, **Stacy Maddocks** University of KwaZulu-Natal

Rationale/Background: Recently, several universities in Canada have initiated Black Faculty Cohort hiring initiatives in an effort to promote equity and improve diversity among academic staff. A similar imperative has been ongoing in South Africa for the past few years. While South Africa is known to be a diverse country, its history of racial inequity continues to be felt in most sectors of society almost three decades into democracy. To address historical inequalities, 'transformation' has for some time, been a buzzword; applied to various sectors, and largely understood to mean improving access to opportunities for historically disadvantaged people. The transformation imperative within the Higher Education in South Africa also includes active recruitment strategies to attract, develop and retain Black Academic faculty across all disciplines. Coupled with this is the need to address health inequities that continue to plague certain segments of society. As such, there is recognition that transformation of the health system cannot be separated from the need transform health professions education programmes to be more reflective of South African society.

Instructional Methods: This workshop will be presented on the backdrop of the shared experiences of health professions educators working within the context of a transformative agenda at a South African university. Five academics representing different race, gender and professional backgrounds will present the findings from a recent panel discussion on the implications of a transformation agenda for Black Faculty, as well as the need for transformation of curricula within health professions programmes. Thereafter, workshop attendees will break into thematic groups to discuss different aspects relating to Equity, Diversity and Inclusion of Black academics in health professions education programmes. The session will conclude with feedback and summary of the main points for improving the experiences of Black Faculty and strengthening diversity and inclusion within health professions education programmes.

Target Audience: Institutional Leaders and Faculty and within HPE programmes

Learning Objective: In the context of the need to improve racial equity in health professions education, this session will cover the following learning objectives: 1. Define Transformation in Health Professions Education 2. Describe Faculty Development Challenges of Black Cohort hires 3. Identify Curriculum Transformation needs within HPE programs

WB: April 24, 2022, 15:30 MST

Glen 205 - CTCC

WB-1

68022

Professionalism: Developing a Framework for Evidence Informed Curriculum

Sue Murphy University of British Columbia, **Susan Paul** College of Physical Therapists of BC, **Janet Lundie** University of British Columbia

Rationale/Background: Unprofessional behavior amongst learners and health professionals continues to be problematic. Teaching, assessing, and remediating professionalism is challenging, due to its multifaceted nature, the influence of context, and lack of a clear definition or competencies as we have in other aspects of practice. This can lead to a "shotgun" approach to the professionalism curriculum where multiple methodologies are employed in the hope that "something will work" to capture the essence of professionalism. While this approach may have merits, a more targeted and evidence informed approach is needed. In this workshop, four evidence informed conceptualizations of professionalism (competence, behaviors, values and identity) will be explored with a focus on designing curricular approaches to address each of these. Participants will explore and co-create curricular approaches which are evidence informed and are clearly linked to specific learning outcomes.

Instructional Methods: Following a brief overview of how professionalism is conceptualized in the literature, participants will break into small groups to discuss and strategize how to teach, assess and remediate professionalism utilizing one of the four conceptualizations. Groups will report back for large group discussion and debate, and end with a case study to apply the concepts to a real-life scenario.

Target Audience: All health professionals involved in the teaching, assessment, and remediation of professionalism, in both academic and clinical settings. Content will be applicable to both novice and experienced educators.

Learning Objective: By the end of the workshop, participants will be able to: 1) Identify four evidence informed conceptualizations of professionalism 2) Align teaching, assessment, and remediation methods with key elements of professionalism 3) Develop a more targeted and evidence informed professionalism curriculum

Glen 206 - CTCC

WB-2

68547

Curriculum Innovation: What Do Medical Educators Need to Know about Social Accountability?

Cary Cuncic University of British Columbia, **Joana Gil Mohapel** University of British Columbia, **Cheryl Holmes** University of British Columbia, **Adrian yee** University of British Columbia

Rationale/Background: Medical Schools have an important role and responsibility in directing their education, research, and service activities towards addressing the priority health concerns of their communities, regions and nations they have the mandate to serve (Appendix 1). Therefore, schools are expected to document social accountability plans in their organization and operations, integrate social accountability actions in their educational activities, and demonstrate positive impacts as a result of their education, service, graduates, and partners in terms of their oveall health and the healthcare system. The UBC MD Undergraduate Program uses a social responsibility and accountability framework to inform aspects of the curriculum and define priority health

concerns of the diverse populations of British Columbia. From 2019 to 2021, we used a three-pronged approach to ensure the UBC MD Undergraduate Program curriculum meets social accountability commitments. We embarked on revising the Mission Statement and Social Accountability Framework by consulting various stakeholders: patient partners and their caregivers , educators, learners, healthcare leaders from rural and remote communities as well as Indigenous Health experts and leaders. Based on their feedback, we revised our Mission Statement and defined our priority health populations. We then revised our Exit Competencies to ensure they align with the revised Mission Statement. Finally, we mapped the undergraduate course objectives from all four years to the revised Exit Competencies and priority health populations to identify gaps and unintended redundancies and then initiated curricular adaptations to address these gaps and redundancies. We also developed Equity, Diversity and Inclusion (EDI) guidelines to prioritize teaching medical students these principles so as to enhance their learning in an EDI-focused environment. These guidelines include moving away from illustrating clinical cases with epidemiological examples that may perpetuate health status stereotypes, integrating curriculum material that focuses on health inequities and social determinants of health in addition to promoting the use of inclusive language across all aspects of the curriculum. We facilitate the use of inclusive language in all teaching and learning modalities by designing a comprehensive Inclusive Language Guide, which was designed in collaboration with the Faculty Development team and following extensive consultation with learners, faculty and educational leaders.

Instructional Methods: The format will be highly interactive through the use of discussion, and participant questions and answers. Each speaker will provide a short introductory talk covering one of the objectives and discuss the institutional experience. The interactive component will contribute to more than half of the session.

Target Audience: We encourage educational leaders, faculty and learners to attend the workshop.

Learning Objective: At the end of the workshop, participants will have an approach to: 1. Applying equitable and inclusive engagement when designing a Social Accountability framework. 2. Developing a strategy to apply a Social Accountability framework in curricular design. 3. Evaluating the effectiveness of a Social Accountability framework.

Glen 208 - CTCC

WB-3

69366

Anishinaabe Mino'ayaawin - People in Good Health: Foundations of Indigenous Cultural Safety

Rafa Khan Indigenous Primary Health Care Council, **Dakota Recollet** Indigenous Primary Health Care Council, **Mallika Patil** Indigenous Primary Health Care Council

Rationale/Background: Notions of cultural safety are centred on cultural competency - a concept limited to knowledge acquisition. A shift from cultural competency to cultural safety is required in the health care system. Cultural safety requires providers to consider how socio-historical contexts, structural and interpersonal power imbalances shape one's health care outcomes. Providers that practice cultural safety are self-reflective about their position of power and the impact this has on Indigenous clients. Cultural safety is defined by those who receive care, not those who provide it.

Instructional Methods: The workshop will be learner-centric and enable participants to engage in practical exercises through featured scenarios, co-designed with Indigenous Knowledge Keepers and educators which

represent an authentic approach to fostering culturally safe wise practices.

Target Audience: Health care providers.

Learning Objective: 1. Describe cultural safety and contrast the concept from interrelated ideas including cultural competency. 2. Develop approaches to reconciliation in health care when working with Indigenous Peoples and assess existing stereotypes. 3. Identify the core tenets of 'reconciling relations' with Indigenous individuals and communities, within health-based settings.

Glen 209 - CTCC

WB-4

69071

Reshaping your CaRMS Selection Process

Quinten Paterson University of Saskatchewan, **Riley Hartmann** University of Saskatchewan, **Rob Woods** University of Saskatchewan, **Lynsey Martin** University of Saskatchewan, **Brent Thoma** University of Saskatchewan

Rationale/Background: Residency selection within Canada has faced increased scrutiny recently as the number of unmatched Canadian medical school graduates rise (1). Selection processes have been criticized for their potential bias and lack of transparency. Despite Best Practice Recommendations having been published nearly a decade ago (2), there is little evidence suggesting that they have been widely implemented. Furthermore, it can be a monumental task to develop or change a residency selection process. This workshop will leverage the experiences of the presenters to guide participants through the development of a rigorous and fair residency selection process.

Instructional Methods: Prior to participation, participants will be sent a list of questions to consider in preparation for the workshop, specifically asking them to focus on what they are looking for in applicants, what resources they have available to them to assist them in the process (faculty, residents, administrative staff, technology, etc.). During this 1.5-hour workshop, participants will be guided through the process of building a rigorous and fair residency selection process. Activities will include the short presentation of an exemplar residency selection template (3) followed by large and small group discussion as well as instructor-supported creative time. Ultimately, we will aim for each participant to design a residency selection process that is specific to their program, specialty, and local context. To facilitate this process, they will be supplied with multiple template documents to help structure their residency selection process creation.

Target Audience: This workshop is targeted toward Program Directors, Assistant Program Directors, Chief Residents, and any other faculty or administrative staff that are involved in the residency selection process.

Learning Objective: By the end of this workshop, participants will be able to: 1. apply strategies for best practice in resident selection to their local context 2. design a residency selection process relevant to their specific residency program and context 3. fairly and transparently select residents to their residency training program

Virtual 5

WBV-5

69078

The Power of Inclusive Language

Dalia Al Mouaswas The Michener Institute of Education at UHN

Rationale/Background: As we make a promise to foster inclusion and build a culture of belonging in our organizations, we must also recognize the power our words have on the people around us and our environments as a whole. This workshop explores the concept of inclusive language and micro-aggression and they can affect the culture of our environment and our practices as healthcare providers, educators and learners. The workshop also explores bias in language as well as the roles and responsibilities of the speaker and the listener and provides practical tools to support the practice of inclusive language. Through case studies and small group activities, participants will be able to discuss and share experiences pertaining to inclusive language.

Instructional Methods: The workshop will include several small group activities with large group debrief and disccusion, In addition a scenario video will be played with opportunities to discuss the scenario at the beginning as well as at the end of the workshop.

Target Audience: All

Learning Objective: - Understand structures of inclusive language - Recognize the impact of language on a culture of belonging - Differentiate between calling in and calling out - Apply calling in techniques to speak up to non-inclusive language

Virtual 6

WBV-6

69656

Creating Brave Spaces: Addressing EDI in Faculty Development Using Simulation

X. Catherine Tong McMaster University, **Anjali Kundi** McMaster University, **Tejal Patel** McMaster University, **Aaron Geekie-Sousa** McMaster University, **Pamela Elmhirst** McMaster University, **Mohammad Zubairi** McMaster University, **Madeleine Verhovsek** McMaster University, **Arden Azim** McMaster University

Rationale/Background: Rationale: Equity, diversity and inclusion (EDI) curriculum, including antiracism and anti-oppression, is a unique area where health professions educators share a high level of interest and commitment, but a low level of comfort. While institutions prepare health professional educators to engage in and lead these conversations, a disconnect still exists between classrooms and the "real world" clinical environment. It can be difficult to find the opportunities to practice the skills to navigate these topics. A high level of tension and emotional labour can be a barrier to this practice. In clinical teaching in acute care, simulation-based education has been demonstrated to improve knowledge, confidence, and performance. Simulation has also been shown to be an effective tool in teamwork and communication skills development. It is with this rationale in mind that a workshop using simulation to support EDI competencies in faculty development is proposed.

Instructional Methods: The workshop will start with an overview of simulation in faculty development activities. We will poll the group on their experience in faculty development activities supporting EDI competencies. We will then enter breakout rooms and present an example of simulated interaction portrayed by co-facilitators. The participants are invited to enter into a simulated role of a preceptor, or a colleague, to respond to an incidence of microaggression. Techniques like time-outs and rapid-cycle deliberate practice will be leveraged for optimal experience for the participants. Finally, we will review the challenges in incorporating an EDI lens and principles in teaching and faculty development.

Target Audience: This workshop is targeted to all faculty members and faculty developers.

Learning Objective: 1. Define EDI principles and values in clinical teaching and faculty development 2. Practice responding to incidences of microaggression or discrimination that threaten an inclusive environment

using simulation based education 3. Outline the challenges and pitfalls that faculty developers face in addressing EDI competencies in faculty development.

WC: April 25, 2022, 10:00 MST

Glen 205 - CTCC

WC-1

69087

[Training like an Athlete? Employing Sport Psychology Principles in Medical Education to optimize Performance](#)

Victor Do University of Alberta, **Cheryl Goldstein** University of Alberta, **Roshan Abraham** University of Alberta

Rationale/Background: Competitive sport and medical training share commonalities as high stress environments requiring peak performance. Individuals in both settings train for years with grueling schedules. Given these similarities, are there aspects of elite athlete training that we can utilize in medical education? Elite athletes employ a number of sport psychology techniques/principles to assist them in reaching their potential. Given the importance of supporting peak performance, medical education has the opportunity to utilize techniques and approaches from sport psychology when considering how to best promote self-efficacy, metacognition, goal setting and reflection practices, which are already discussed but would benefit from applying a new lens. How can we improve medical trainee wellbeing, performance and their lifelong learning and development using sport psychology principles? Our workshop is designed to help educators understand and adopt these principles into curricula and education more broadly.

Instructional Methods: We will begin with a lecture on basic sport psychology principles and how they can be applied to medical education from the literature and our experience. (15 min) Review an interactive case study that highlights how sport psychology principles can be used to address a challenging scenario (30 min) Guided small group work to develop an approach/strategy/next steps to integrate these concepts into curriculum. (45 min)

Target Audience: Undergraduate medical educators who are interested in learning how to engage in developing teaching sessions using concepts from sport psychology to support medical students.

Learning Objective: Understand how principles from sport psychology can be adopted by medical learners to reach their greatest potential. Explore the integration of sport psychology principles into medical education curricula.

Glen 206 - CTCC

2022-04-25 10:00 MST

WC-2

69187

[Advancing Knowledge: Best Practices When Contributing a Peer Review](#)

Kevin Eva University of British Columbia, **Katherine Wisener** University of British Columbia, **Chris Watling** Western University, **Renate Kahlke** McMaster University

Rationale/Background: Peer review is essential to the scholarly enterprise; it has a formative function (through which we receive feedback on and improve our work) and a gatekeeping function (through which journals curate their content). However, reviews can be of varying quality, threatening the collegiality, efficiency, and integrity of the process. Given the risks involved and uncertainty regarding what defines a good review, many early career researchers find it difficult and anxiety-

provoking to navigate the review process. This workshop leverages our different perspectives (as a novice researcher, early-career reviewer, expert in academic writing, and journal editor) to outline the characteristics of an effective review, including: what the review ought to achieve (for the journal, editorial team, and authors), and when to accept or decline an invitation to review. We also discuss strategies for effective writing in the context of peer review (e.g. tone and style) and offer advice on how to optimize the time spent engaging in peer review to enable the reviewer's professional development and reputational advancement. This workshop offers extensive opportunity for discussion between participants and with our diverse group of facilitators.

Instructional Methods: 10 min: Introduction and large-group discussion about first experiences with peer review (RK and KW) 10 min: Presentation: Characteristics of an effective peer review (KE and RK) 15 min: Small groups analyze peer reviews provided to identify effective and ineffective elements 5 min: Debrief 10 min: Presentation: Effective writing for reviewers (CW) 5 min: Debrief 15 min: Small groups practice providing/rewording feedback 10 min: Presentation: Advantages of peer review and maximizing professional advancement (KE) 10 min: Q&A (All)

Target Audience: Researchers at any career stage, but may be particularly relevant for novice researchers

Learning Objective: 1. Analyze effective and ineffective elements in peer review 2. Compose effective feedback for a peer review 3. Discuss the role of peer review in professional advancement

Glen 208 - CTCC

WC-3

69592

[Mentorship and Promotion of Underrepresented and Minority Faculty in Academic Medicine: Unlearning and Relearning](#)

Ming-Ka Chan University of Manitoba, **Mala Joneja** Queen's University

Rationale/Background: Underrepresented minority (URM) individuals and groups within academic medicine do not have the same experiences as the dominant groups. Mentorship and promotion of such groups need to be revisited as the usual support systems may be insufficient due to inherent biases. This workshop will explore how implicit and structural biases impact the promotion process and achieving other academic success. Practical tips and strategies to ensure thriving of URM academics will be crowdsourced and shared.

Instructional Methods: Icebreaker/reflection exercises Brief didactic with handout for introduction to terms and concepts Storytelling and co-creation Pairs/Small group case discussion with large group debrief

Target Audience: Faculty Faculty Development planners/instructors

Learning Objective: Objectives Upon completion of this session, participants will be able to: 1. Describe the impact of bias on promotion and other academic success 2. Discuss how mentorship and sponsorship needs to shift in order to support URM groups who experience bias. 3. Share examples of how to enact allyship in your context(s) to mentor and support underrepresented groups. 4. Co-create new strategies to mentor and support URM groups

Glen 209 - CTCC

WC-4

69598

Using Culinary Medicine in Clinical Practice to improve health and well-being

Dr. Shivani Bhat University of Toronto, **Karen Fung** University of Toronto, **Dr Rahul Jain** University of Toronto, **Dr Sheldon Tobe** University of Toronto, **Dr Karen Fleming** University of Toronto, **Prof Sumantra Ray**

Rationale/Background: It is widely known that healthy eating can better prevent and manage chronic diseases, particularly cardiovascular disease. A significant number of medical students, residents and practicing physicians are dissatisfied with the nutrition education they receive and their ability to provide relevant and appropriate nutrition counselling. 82.3% of family physicians reported their formal nutrition training in medical school was inadequate. The Canadian Clinical Practice Guidelines on the Management and Prevention of Obesity emphasize the importance of nutritional assessment and dietary intervention as part of an integrated approach within primary care. However, most physicians do not feel comfortable, confident or adequately prepared to provide nutrition counselling. Teaching kitchens have emerged as an education tool that combines culinary instruction using nutrition education, mindfulness, and personalized health coaching. Cooking together in teams also fosters a sense of community leading to better well-being. To appropriately address chronic disease management, future physicians must be equipped with the appropriate information to competently and confidently address dietary concerns. We seek to conduct an informative and fun workshop where participants will: (1) be exposed to Canada's C-CHANGE guidelines (focused on nutrition), (2) refine their communication skills to provide nutrition advice during clinical consultations and (3) discover a fun and new activity (i.e. cooking) and/or refine their culinary skills to improve their own well-being and consequently reduce burnout.

Instructional Methods: Problem-based learning session: Participants will work in groups to determine appropriate lifestyle and dietary recommendations in the clinical case presented. Video by Professional Chef: Through a short pre-recorded video, a Professional Chef will demonstrate how to cook a healthy meal based on C-CHANGE dietary guidelines to promote cardiovascular health. The Chef will highlight various ingredients, substitutions, and cooking techniques used to create this meal.

Target Audience: All physicians and residents interested to learning how to provide basic dietary advice.

Learning Objective: Upon completion of this workshop, participants should be able to: 1) Identify recommendations for healthy eating and nutrition from the C-CHANGE Guidelines 2) Implement practical pearls on educating and counselling patients on nutrition and healthy food choices to promote cardiovascular health 3) Enhance personal culinary skills and promote wellness through culinary arts and team building

Virtual 5

WCV-5

69498

Aspire for Mediocrity: Ongoing Professional and Academic Racism and Discrimination in the Australian Health Care system

David Kandiah Northern Beaches Rheumatology

Rationale/Background: Background: "On 23 December 1901 the Immigration Restriction Act in the Commonwealth of Australia came into law. The legislation was specifically designed to limit non-British migration to Australia. It represented the formal establishment of the White Australia policy. In the 1800s criticisms of non-white groups were based on the idea that they were less advanced than white people in all ways, especially morally and intellectually. In Australia, this idea focused particularly on people of Asian descent. Ironically, Australia saw itself as a utopia and a working man's paradise, a forward-thinking country that promoted equal rights and opportunities, for 'desirable' citizens at least. The nation aimed to attract a well-paid, male, white and skilled labour force to uphold this image." Summarised from https://www.nma.gov.au/defining-moments/resources/white-australia-policy (Accessed 13 October 2021). 120 years year later, this philosophy has not changed. Australia should have been treated like South Africa with international sporting and trade bans. Queen Elizabeth 2 failed the future coloured people of Australia by not throwing Australia out of the Commonwealth until they sorted out their racist attitudes. One has only to switch on the main commercial television channels in Australia to see the overwhelming white faces that beam back to them. The Australian parliament still only has the equivalent of 3 Asian members of Parliament out of 227 members; with an Asian proportion of the population of more than 15% based on the last census.

Instructional Methods: As a doctor in Australia for the past 34 years I have faced repeated episodes of racism and discrimination in loss of job opportunities, awards and grants. Australian universities and hospitals have been rewarded by innovative methods of promoting their white supremacists with accolades and awards at the expense of merit and achievements of their colored citizens and people. In this workshop, multiple real examples of strategies employed by Australian white supremacists in maintaining their status quo will be presented. In medical education, while Asians and people of colour perform well, various devious methods are employed to direct prizes and awards to white students and academics. In this second decade of the 21st century, it is necessary to discuss the methods employed by these people to suppress non-white achievement, including blatant plagiarism of their work. This recognition is important so that international students and research collaborators, important cash cows for Australian universities, come in with eyes wide open and make informed decisions about the best opportunities in their future careers and interactions.

Target Audience: Academics, students, administrators and policy makers interested in: 1. The reality of dealing with institutions and people from Australia. 2. White supremacy that still permeates the 21st century

Learning Objective: 1. Strategies employed to facilitate discrimination. 2. Recognition of subtle and covert racism and discrimination. 3. Awareness of alternative strategies to promote equity in education and health care delivery. 4. Willingness to speak up and be counted in the new environment.

Virtual 6

WCV-6

69219

Decolonizing Critical Reflection: A Useful Framework for Ensuring Culturally Safe Medical Education Research, Practice, and Care Delivery

Libby Dean Dalhousie University, **Lisa Bishop** Dalhousie University, **Sarah Burm** Dalhousie University, **Baikie Gail** Dalhousie University

Rationale/Background: Medical schools play a crucial role in moving beyond conversations around truth and reconciliation. They need to participate in the transformative work required to create, and sustain, a more equitable and culturally relevant educational and health care experience for Indigenous peoples (AFMC, 2019; TRC, 2015). However, enacting the Truth and Reconciliation Commission (TRC) Calls to Action is not just an institutional responsibility; individually, we need to look at the ways colonialism influences how we think, what we value, and ultimately

how we interact with one another. Through decolonizing the 'self', culturally transformative actions are possible. Yet, what does it mean to engage in decolonization work? Where might one begin? This workshop will introduce the theory and practice of decolonizing critical reflection (DCR): a pedagogical method that equips people with both a theoretical understanding and distinct process on how to begin decolonizing their thoughts, interactions, and practices (Baikie, 2020). DCR enables individuals (both non-Indigenous and Indigenous) to critically appraise, challenge and change, if necessary, tacit worldview assumptions, values and beliefs inherent within themselves and implicit within the material (e.g., educational content) and spaces (e.g., professional and clinical interactions) they regularly occupy.

Instructional Methods: Participants will engage in facilitated experiential activities that help them process their experiences and interrogate their existing beliefs. Interactive practice exercises will be followed by small group reflection and discussion. Participants will leave with tangible strategies and resources designed to aid them in their individual decolonizing journey.

Target Audience: Clinicians, researchers, and medical trainees with a genuine interest in learning more about decolonization theory and practice. Participants should already have an awareness and understanding of the necessity and value of engaging in difficult conversations around such topics as colonialism, identity, reconciliation, social justice, and action.

Learning Objective: At the workshop's conclusion, participants will be able to: • Identify the key attributes of the decolonizing critical reflection (DCR) method • Use the DCR process to critically reflect on intercultural incidents regularly encountered within the academy and clinical learning environment • Identify opportunities and next steps for applying DCR in their work and within their organizations

WD: April 25, 2022, 15:00 MST

Glen 205 - CTCC

WD-1

69089

Anchoring Quality Improvement and Patient Safety Curricula on the Short Film "Falling Through the Cracks - Greg's Story" : Experiences at two Canadian Medical Schools

Ward Flemons University of Calgary, **Irina Charania** University of Alberta, **Shaan Chugh** University of Toronto, **Thuy-Nga (Tia) Pham** University of Toronto, **Kristin Fraser** University of Calgary **Teri Price**

Rationale/Background: "What can I do to improve the system that I work in or receive service from?" is a question frequently posed by healthcare learners across Canada after watching "Falling Through the Cracks: Greg's Story". This 30 minute film, directed by one of Canada's leading television directors and created by Greg's family, follows Greg Price, a healthy young man who died tragically of a treatable condition after falling through many cracks in the Canadian health care system. At the University of Calgary, the Collaborative Practice Unit focuses on teamwork skills to optimize patient safety. Greg's story was introduced in 2017 as an anchoring experience that the students reflect on throughout the curriculum. The impact on early learners was clear, and the film and teaching resources were created. The film was first shown to first-year medical students in 2017, followed by a powerful debriefing session with Greg's family and faculty. Small group sessions distributed across first year returned to the story and the film clips, from which students identified examples of missed opportunities and practiced teamwork in non-clinical activities. During the pandemic, the movie and workshops continued online with some challenges, but provided Calgary the opportunity to include

students from other faculties. In 2021, 900 interprofessional students from 9 schools debriefed the film together in small groups. Collaboration with the University of Toronto started in 2018, airing the movie in first year medical school with the family present. Similar to Calgary, a fulsome curriculum was established, teaching fundamental principles of teamwork, patient safety and quality improvement over four years, referencing to Greg's Story, incorporating shorter clips, with culmination in a small group significant event analysis in the final week of medical school, online using zoom over the pandemic.

Instructional Methods: Participants experience the curriculum by watching the movie as medical students do in Toronto and Calgary, followed by active participation in interactive exercises. Using a framework for team skills, both medical schools' curricula are contrasted, and participants reflect on their own school's patient safety and team skills teaching, and apply and take-home the learnings of the workshop to their own curriculum.

Target Audience: Educators interested in quality improvement, patient safety, teamwork and leadership training, and interprofessional collaboration.

Learning Objective: At the end of the workshop, participants will be able to: 1. Create meaning and motivation for teaching patient safety and quality improvement by using the film " Falling Through the Cracks". 2. Identify common and systemic challenges to providing safe, continuous care across clinics and/or institutions. 3. Develop quality improvement and team skills in medical learners using fun and inexpensive activities and incorporating small film clips.

Glen 206 – CTCC

WD-2

69093

Integrating Professional Identity Formation into Competency-Based Curricula

Robert Sternszus McGill, **Richard Cruess** McGill, **Sylvia Cruess** McGill, **Yvonne Steinert** McGill, **Natasha Khusigara** University Hospital Limerick

Rationale/Background: Recent curricular reform in health professions education has focused on competency-based approaches to learning and assessment. Despite professional identity formation (PIF) being a core objective of health professions education, competency-based curricula have been criticized for reducing the being of a physician to demonstrable behaviors that do not adequately address PIF. Moreover, learners have expressed concern with behavior-based professionalism curricula and the perception that they are overly focused on professionalism lapses and tend to promote standardization rather than individual expression. This workshop aims to address how competency-based curricula can support and challenge the integration of PIF and identify ways in which curriculum designers can overcome these challenges and meaningful integrate PIF into their curriculum.

Instructional Methods: Brief interactive lectures will introduce key concepts and literature on PIF. Each interactive lecture will be immediately followed by an exercise (e.g., reflective writing, think-pair-share, small group discussion) focused on addressing what PIF is, the facilitators and barriers to addressing PIF, and applying approaches to teaching and assessing PIF.

Target Audience: This workshop is intended for educators who are involved in the design and delivery of curricula at the undergraduate or postgraduate level.

Learning Objective: By the completion of this workshop, participants will be able to: (1) Define PIF; (2) describe the influence of health professions education on PIF; (3) identify ways in which competency-based curricula

promote and challenge the integration of PIF into curricula; and (4) implement strategies to support the integration of PIF in their local undergraduate or postgraduate programs.

WE: April 26, 2022; 08:30 MST

Glen 205 - CTCC

WE-1

69278

Owning Allyship: Six Ways to Call-out Racism and Enact Allyship in Medical Education

Lyn Sonnenber University of Alberta, **Victor Do** University of Alberta, **Constance LeBlanc** Dalhousie University, **Jamiu Busari** Maastricht University

Rationale/Background: Addressing racism in our Faculties of Medicine must be an active strategic goal. One way to do this is through allyship, the practice of unlearning and re-evaluating, in which a person in a position of privilege and power seeks to operate in solidarity with a traditionally marginalized group. Having practical tips on how to practice allyship, giving educators and leaders background and important tools to promote equity, diversity and inclusivity is critical. Through six broad actions of being, knowing, feeling, doing, promoting, and acting, we hope to empower individuals in practicing allyship and addressing racism in medical education. Creating psychologically safe spaces and educating ourselves on our complex histories and how they influence the present are important steps. Recognizing racism, and advocating for change, augments awareness from which we can pivot conversations. Acknowledging potential feelings of shame, guilt, and embracing shifts in privilege, allow necessary, but challenging growth. Importantly dismantling the racist structures that exist within medicine will address systemic racism in medicine.

Instructional Methods: We will actively integrate the audience's perspective through dialogue, using case studies, powerful stories, and lived experiences. Using challenging cases, we will highlight the six steps of Being, Knowing, Feeling, Doing, Promoting and Acting. In this safe space we can explore, acknowledge, and reflect collectively upon our insecurities, while co-creating tools to address racism and promote allyship.

Target Audience: All educators and learners who wish to learn actionable steps in practicing allyship.

Learning Objective: Understand the concept and actions of allyship Identify actionable strategies to address racism. Recognize privilege and use it to amplify underrepresented voices.

Glen 206 - CTCC

WE-2

69345

More than Words - Diversity in Postgraduate Medical Education

Amanda Condon University of Manitoba, **Jackie Gruber** University of Manitoba, **Lisa Monkman** University of Manitoba, **Ming-Ka Chan** University of Manitoba, **Sara Goulet** University of Manitoba

Rationale/Background: Meeting the health needs of society and addressing inequities and racism in healthcare requires a longitudinal commitment to diversity in health professional education, across the educational continuum. Diversity statements have become a common part of program descriptions and selection goals for postgraduate medical education (PGME) programs. How do these statements reflect a program's commitment to diversity? How is this commitment reflected in

the selection process? How is the impact of these statements measured? This session will review actionable strategies to make meaningful changes to address diversity within PGME selection processes and discuss opportunities for incorporating these strategies across the educational continuum.

Instructional Methods: The workshop will consist of an introduction to diversity within the health workforce and the associated negative patient outcomes when diversity is lacking. Workshop participants will then review sample diversity statements and selection process goals, in small groups. Participants will identify selection processes that support diversity statements and reduce the potential for bias in resident selection. Participants will use a tool to critique example selection processes; this tool will be able to be used by participants at their own institutions after participation in the workshop. This workshop will consist of a short didactic component and will primarily be focused on discussion and application of a tool to critique existing resident selection processes.

Target Audience: Program directors and all involved in resident selection

Learning Objective: 1. Review the elements of a diversity statement as part of a program description and discuss their impact on resident selection. 2. Identify measurable strategies to implement within a selection process to address bias in applicant selection. 3. Apply a tool to selection processes looking for areas of potential for bias and determining strategies to address these biases.

Glen 208 - CTCC

WE-3

69349

Remediating professionalism in residency using reflective writing: Practices and pitfalls

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

Rationale/Background: Underperformance in the Professional Role has high stakes for medical learners and educators. Problems with professionalism in residency, unless appropriately and effectively remediated, may signal serious problems later in practice, including patient dissatisfaction, medical errors, physician burnout, and strained workplace relationships. Yet, remediating unprofessional behaviour is especially challenging. Strategies for remediating professionalism are not standardized, and 'rules' are often unwritten and emerge through trial and error across training programs. Reflective writing has great potential in this difficult domain, if used wisely. But, since remediation happens in silos, the 'why' and 'how' are not readily shared among educators. This workshop creates space and engages participants in dialogue about their experiences using reflective writing to navigate remediation around professionalism-approaches attempted, challenges encountered, and lessons learned. Participants will learn about and explore strategies for remediating professionalism using reflective writing.

Instructional Methods: We will employ various instructional methods to inspire critical reflection. The workshop begins with a discussion about reflective writing and the ways it has been taken up in medical education, including participants' experiences with it. We will share and discuss research-informed strategies for using reflective writing to navigate professionalism challenges. Participants will engage in small-group exercises (followed by larger-group sharing) to explore the potential and challenges of applying reflective writing as a mitigation strategy, including developing prompts for a writing assignment appropriate for a specific case and exploring what constitutes a 'good' or sincere reflection using a mock writing sample. Participants will have opportunities to ask

questions. The workshop will end with a reflection on take-aways of the lessons learned.

Target Audience: Medical educators involved in remediation and/or learning plans around professionalism, as well as medical learners and individuals engaged in professionalism education such as program directors, program assessment or remediation leads, and deans

Learning Objective: - Describe how reflective writing might be used in remediating professionalism - Recognize tensions in using reflective writing for assessment as opposed to using it to stimulate learning - Develop effective prompts for reflective writing aimed at professionalism issues - Share lessons on structuring reflective writing exercises as a remediation strategy

Glen 209 - CTCC

WE-4

69522

Communication Skill Training: Learning to hold difficult conversations virtually

Catherine Proulx University of Toronto, **Anne Kawamura** University of Toronto, **Dominique Piquette** University of Toronto, **Briseida Mema** University of Toronto

Rationale/Background: The shift towards virtual medical education and virtual healthcare delivery has been accelerated by the recent pandemic. This trend will surely continue post-pandemic. Communication skill training has traditionally occurred in person and has focused on in-person interactions with patients and families. As of yet, limited evidence guides educators on how to teach advanced communication skills (e.g., having difficult conversations with patients and families) in virtual environments. In addition, having difficult conversations with patients/families virtually may present specific challenges that have not been routinely addressed in existing training programs for communication. This workshop will help participant develop strategies to teach communication skills virtually, and to adjust their teaching content the address the specificities of virtual conversations with patients and families.

Instructional Methods: The workshop will be divided in three sections: 1) educational implications of virtual communication with patients/families; 2) educational strategies to learn communication skills virtually; and, 3) curricular integration of virtual and in-person learning. Each section will include a large-group discussion (share your stories, productive brainstorming) or a small-group practice & reflect exercise, and a short presentation that summarizes key take-home messages.

Target Audience: Educators and teachers involved in communication skill training.

Learning Objective: 1- Identify similarities and differences between in-person and virtual difficult conversations and explain educational implications; 2- Identify and practice concrete strategies to teach advanced communication skills through virtually; 3- Compare the strengths and limitations of virtual and in-person communication skills training and identify opportunities for simulation curricular integration.

Virtual 5

WEV-5

69542

Wellbeing Under Pressure: Are health professionals being heard, valued and supported?

Lisi Gordon University of Dundee, **Anita Laidlaw** University of St Andrews, **Daniele Carrieri** University of Exeter, **Karen Mattick** University of Exeter, **Kim Walker** University of Aberdeen

Rationale/Background: As the world grapples with COVID-19, additional stresses placed on healthcare workers and organisations shone a spotlight on wellbeing and resilience. Much has been made in the media and social media of the impact these experiences have had on healthcare workers' mental health. Whilst not new, the lack of an evidence base for interventions that support the wellbeing and resilience of healthcare workers is striking. Thus, healthcare professionals and their organisations struggled to put appropriate support mechanisms in place in a timely manner during the pandemic. Beyond COVID-19, healthcare worker wellbeing prevails as a key organisational and institutional concern in global healthcare. Healthcare worker stress and burnout and the consequent impact on patient care is a significant challenge across the world without adequate evidenced-based mechanisms of support.

Instructional Methods: We propose a 90-minute virtual workshop: • Findings from two large scale UK-based projects, Care Under Pressure, and the Scottish Doctors Wellbeing study will be presented, as a basis for discussion. These studies focused on health professionals' wellbeing across the career continuum and evidence for supportive interventions were explored using realist review and qualitative research methodologies, respectively. • Facilitated discussion in breakout groups will form the majority of the session. • Each breakout group will have a chance to provide (timed) feedback to the rest of the group.

Target Audience: This workshop will attract: international participants across the career continuum who place wellbeing of health care workers at the heart of their work; policy makers responsible for wellbeing of staff in organisations; clinicians who have roles as trainers and clinical leaders; and researchers who have interest in new methodologies and large-scale studies.

Learning Objective: • Participants will be able to consider and compare how the studies relate to issues of wellbeing in their own context • Participants will be able to discuss ways in which the evidence can be used to construct interventions that support health professional wellbeing at an individual, team and organisational level

Virtual 6

WEV-6

69585

"There is a crack in everything, that's how the light gets in": Sharing Lessons Learned in the Implementation of the Clerkship Program During the Pandemic

Shibu Thomas University of Toronto, **Clare Hutchinson** University of Toronto, **Angela Punnett** University of Toronto, **Anthony Pignatiello** University of Toronto, **Stacey Bernstein** University of Toronto, **Seetha Radhakrishnan** University of Toronto

Rationale/Background: The COVID pandemic necessitated the immediate pivot from business as usual, to constant change as the new normal. In March of 2020, without time to prepare, we shifted to running clerkship for four months without the in-person presence of clerks. Attention also had to be redirected to procuring PPE, supporting distressed students and faculty, creating new curriculum on topics like donning and doffing and virtual care, as well as helping students plan for CarMS without national

travel or in-person interviews. Yet synchronously and surprisingly, the pandemic brought unanticipated opportunities. We saw unprecedented levels of national collaboration, access to open-source educational materials, and incredible curricular innovations. This workshop will focus on sharing best practices adopted during the pandemic.

Instructional Methods: This workshop will utilize the questions below as a springboard for idea sharing. Our interactive methods will include think/pair/share, small group table discussions, and large group interactive debrief. 1. What were the most significant obstacles you faced when conducting clerkship during the pandemic? 2. What is the most successful change in education practice that you adopted? 3. What is one educational practice change made in your program that wasn't successful? Why? 4. What is one pandemic practice change that you will continue to maintain as part of your program?

Target Audience: Administrators, educators, trainees

Learning Objective: Session participants will: 1. Share challenges experienced in clerkship during the COVID-19 pandemic: "Is this what you wanted" 2. Identify the unanticipated opportunities and innovations inspired by the pandemic: "Hallelujah" 3. Incorporate lessons learned for post-pandemic clerkship renewal: "Bird on the wire."

WF: April 26, 2022, 13:30 MST

Virtual 1

WFV-1

68799

[The CFPC's Professional Learning Plan: Optimize your CPD!](#)

Dr. Janice Harvey The College of Family Physicians of Canada, **Zarreen Warsi** The College of Family Physicians of Canada

Rationale/Background: The past year has shown us how sudden change can pose immense challenges to the way we practice medicine and plan for the future. Having a solid strategy-whether it's for optimal patient care, office efficiency, or your next CPD activity-is one way to approach some of this uncertainty. Using a process that encourages you to reflect on your patient population and practice needs to set specific CPD goals is a great way to start. That is why the CPD team at the College of Family Physicians of Canada (CFPC) is pleased to share the new Professional Learning Plan (PLP)! Built on evidence-based literature, the PLP is a Mainpro+ certified assessment activity that is both practical and interactive. This tool is designed to help you identify your learning gaps, create goals to help close those gaps, and support you in following through with your plan! Be prepared to dive into the PLP during this interactive session and emerge with a fresh take on planning your CPD goals that will revitalize your enthusiasm for new learning opportunities!

Instructional Methods: Introduction to PLP tool, case study with audience interactivity/CPD goal planning/working with a peer or coach to determine goals and actions/how to write a commitment to change statement/Q+A

Target Audience: Mainpro+ Participants, physicians

Learning Objective: At the conclusion of this presentation, participants will be able to: 1. Use the new PLP to identify practice gaps and establish clear goals to meet your personal and professional learning needs. 2. Create a plan for your next Mainpro+® cycle with relevant continuing professional development (CPD) opportunities. 3. Make use of the tools demonstrated in the workshop to inform long-term strategies for practice improvement.

Virtual 2

WFV-2

69379

[Beyond Nice: using the science of happiness to build fulfillment in medical education](#)

Kevin Weingarten University of Toronto, **Julie Johnstone** 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 to improve lifelong fulfillment from our careers in medicine.

Instructional Methods: This session will alternate between presentations of evidence and small groups activities to explore concepts as they relate to improving 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 Objective: outline the evidence for positive psychology as it relates to the learning environment describe how perspectives of success, purpose, and productive struggle impact lifelong happiness develop practical strategies to bring kindness, empathy, gratitude, and civility into medical culture

Virtual 3

WFV-3

69497

[Walking the Walk on Social Accountability: Exploring Social Accountability Curriculum Development Using Arts Engaged Methods.](#)

Ijeoma Staunton Memorial – University of Newfoundland, **Connie Hu** University of New Mexico, **Hoi Cheu** Laurentian University, **Robyn Preson** Central Queensland University, **Amy Clithero** University of New Mexico, **Jill Allison** Memorial – University of Newfoundland, **Erin Cameron** Northern Ontario School of Medicine, **Tashya Orasi** Lakehead University, **Pauline Sameshima** Lakehead University, **Roger Strasser** Northern Ontario School of Medicine

Rationale/Background: Health professional education institutions, including medical schools, who aspire to social accountability all strive to train a health workforce that meets the priority health needs of the communities they serve. There is an imperative to understand and work with communities in order to meet their needs. This requires ensuring the curriculum is fully embedded with socially accountable principles and values (https://thenetcommunity.org/our-approach/). In the spirit of unlearning and re-learning, this also requires shifting from traditional training that focuses on the individual biomedical model of disease to one that is oriented towards community and broader social accountability. Based on our research, this workshop will explore essential components of developing a socially accountable curriculum and provide resources for

educators to adapt in their local medical school and community context. This module relates to Section 3 of the THEnet's Framework for Socially Accountable Health Workforce on Education, specifically 'how do our learners learn', and 'what do our learners learn'. It provides an overview of the processes involved in introducing curricula to produce a 'fit-for-purpose' workforce.

Instructional Methods: This workshop will engage participants in ways of facilitating learning on social accountability using an arts engaged approach to encourage deeper exploration and sharing of ideas. Participants will work in groups to discuss their own approaches to facilitating learning around social accountability, ensuring social accountability is embedded in their curriculum, and their responses to our presentation on a Curriculum Module we have developed. Participants will then be offered an opportunity to participate in art-making in response to the discussion as a means of further enhancing our understanding of the needs and best practices in embedding social accountability in our medical education programming.

Target Audience: This workshop is for medical educators and learners interested in social accountability and innovative curriculum development.

Learning Objective: After the workshop participants will: 1. Explain the importance of embedding social accountability within the medical education curriculum; 2. Describe new ways to embed social accountability in medical education curriculum; 3. Demonstrate knowledge about arts in research design can be used medical education.

Virtual 4

WFV-4

69511

[Moving Beyond the Pandemic- Harnessing Technology to Design and Deliver Better Medical Education](#)

Heather MacNeill University of Toronto, **Yerko Berrocal** University of Illinois, College of Medicine Peoria, **Daniel Salcedo** Taipei Municipal Wanfang Hospital

Rationale/Background: The pandemic necessitated a rapid change to online delivery, forever changing the possibilities of healthcare education. Now we are transitioning to the next phase of discovery- moving from using technology enhanced teaching because "we have to" towards because "we want to," by "unlearning and relearning" how we provide medical education This interactive workshop will review the current definitions and evidence of online, blended and hybrid learning, explore different models and taxonomies in technology enhanced education, and challenge participants consider (through collaboration) how we need to be thinking differently about technology enhanced healthcare education provision, moving towards a "better" normal.

Instructional Methods: This session will utilize a variety of technology enhanced tools (e.g., Polls, chat, collaborative tools such as mural or padlet, video, and reminder tools) to employ educational methods such as feedback, interactivity, social learning, multimodal and multicomponent learning while highlighting considerations in blended and hybrid environments. Participants will collaboratively create a working document of technology enhanced examples and best practices and commit to using something they have learned in their future practice.

Target Audience: Medical Teachers, Educators and Administrators at all levels- undergraduate, postgraduate, and continuing professional development

Learning Objective: By the end of this session, participants will be able to: 1. Define the difference between online, blended and hybrid learning, and state the evidence currently available for these delivery methods 2.

Discuss practical tips and learning frameworks for online environments 3. Analyse what features of technology enhanced healthcare education we wish to retain, what we want to discard (or go back to traditional methods) and what we are willing to rethink altogether 4. Develop best practices and recommendations in online education moving forward

Virtual 5

WFV-5

69602

[Qualitative ego networks in health professions education: Capturing the self in relation to others](#)

Heather Buckley University of British Columbia, **Anique Atherley** Ross University School of Medicine, **Samantha Stasiuk** University of British Columbia, **Laura Nimmon** University of British Columbia

Rationale/Background: Visual mapping of participants' social networks is gaining traction, yet this research approach has received little focused attention in the HPE literature. A qualitative ego network approach is a compelling research tool because it uniquely maps participants' perceptions of the complex social world they are embedded in. Although many methodologies can explore participants' social world, ego networks can enhance expression of tacit knowledge of one's social environment and encourage reflection. This approach, combined with other qualitative data, can also reveal hidden relational data that the researcher may otherwise not observe or consider. Workshop participants are invited to explore this research approach. We devote the first part to mapping the history and tenets of social network analysis and ego network approaches. We will then showcase our own research where we have used structured and unstructured participant-generated qualitative ego network approaches. In the second part, participants will work in small groups to create ego networks. To enrich the exercise, we will ask participants how this approach can be applied to research questions or practical problems with which they are currently engaging.

Instructional Methods: 5 min: Introduction to workshop - workshop learning objectives 25 min: a) Background of qualitative ego networks and b) Illustrative application of diverse qualitative ego network approaches. Presenters will showcase their own research where they have used qualitative ego network approaches 40 min: Small group activity- Conceptualizing a research question or practical problem and engaging in a qualitative ego network mapping exercise. 20 min: Large group discussion - Reporting back on mapping exercise and discussion on the affordances or challenges of a qualitative ego network approach

Target Audience: General audience of medical educators and medical educator researchers

Learning Objective: To explore how a qualitative ego network can deepen understanding of the self in relation to society and situation To understand how a qualitative ego network can be applied to research questions or practical issues

Virtual 6

WFV-6

69660

[Creating Safer Spaces: Strategies for Faculty Development around EDIIA in the Undergraduate Medical Education Setting](#)

Robert Goldberg University of Toronto, **Jana Lazor** University of Toronto, **Susanna Talarico** University of Toronto

Rationale/Background: Now more than ever, it is important that as medical educators that we create inclusive, anti-oppressive, and compassionate teaching, learning, and clinical environments. Excellence

through equity, diversity, inclusion, indigeneity and accessibility (EDIIA) are key priorities for many Faculties of Medicine across the country. The challenge lies in how we practically do this, particularly when leaders and faculty developers may not be experts in anti-oppression education. During this workshop we will describe our approach to faculty development in an undergraduate medical education setting to supporting faculty in practically implementing EDIIA strategies to make their teaching and learning spaces safe and inclusive.

Instructional Methods: • Didactic presentation: brief overview of the literature, presentation of a possible strategy for faculty development around implementing EDIIA strategies for safe and inclusive environments • Small group discussion: case studies on how to avoid pitfalls that can disrupt the environment, while implementing inclusive strategies

Target Audience: Medical educators, leaders and learners of all levels are welcome and encouraged to attend

Learning Objective: By the end of this session participants will be able to: 1. Describe the components that must be considered when creating a safe and inclusive teaching and learning environment 2. Discuss pitfalls that can disrupt your teaching and learning environment, using the Case Based Learning small group setting as an example 3. Explain what could be incorporated into a faculty development strategy to supporting faculty in practically implementing EDIIA strategies to make their teaching and learning spaces safe and inclusive.

April 24, 2022, 13:30 MST

PFV 1- Covid

PFV 1-1-69469

[Pivoting during the Pandemic: How we successfully flipped in-person Simulation based Undergraduate Anesthesia education to virtual web-based simulation.](#)

Rodrigo Nakatani University of Toronto, **Anita Sarmah** University of Toronto, **Shikha Bansal** Northern Ontario School of Medicine, **Fahad Alam** University of Toronto, **Julian Wiegelmann** University of Toronto

Background/Purpose: At the University of Toronto, we offer 2 days of simulation training to all 252 core Anesthesia medical students. As a consequence of the Covid-19 pandemic, Simulation teaching fell to 25%, placing teaching of crisis resource management at risk. Heeding Plato, "Necessity is the mother of invention", we innovated a virtual reality hybrid to reconcile these gaps.

Summary of the Innovation: We created an immersive group simulation with homegrown tools including avatars, monitors and alarms. Learners participated via cloud-based video (Zoom) to interact within teams each given a virtual scenario. To optimize learning on this novel platform, the usual flow of an uninterrupted scenario and summative debrief required adaptation to segmental debriefing requiring facilitator training. Additionally, all educators underwent technological training. The feedback on our innovation revealed a high level of satisfaction with acquisition of new knowledge, learning competencies and use of relevant educational tools. Comments included: "Very useful, well done - it's difficult not to have in-person sessions, this is a good alternative, we definitely appreciate the hard work put into preparing it!"; "The interactive nature was a useful way to maintain attention throughout, really appreciate the effort to make this happen virtually! Thanks"; "Great session, transition to virtual format was smooth"; "I think continued advocacy for this type of learning amid the pandemic is important. Thanks."

Conclusion: Simulation-based learning is fragile during the extremes of a global pandemic. After strategizing a "work-around" using virtual simulation, we believe that this has potential application across all specialties, ensuring delivery of learning competencies whilst maintaining engagement.

PFV 1-2 - 67773

[Psychological impact of COVID-19 pandemic on health care workers: a multi institute study](#)

M Junaid Khan Ayub Medical College

Background/Purpose: In context of current COVID-19 pandemic, the objective of this study is to assess the psychological impact of ongoing pandemic on health care workers (HCWs) residing in tertiary care hospitals of Khyber-Pakhtunkhwa.

Methods: This crossectional study was conducted from April-June 2020 with convenience sampling approach among HCWs of private and public tertiary care hospitals. After approval from ethical review board, an online form was generated: consisting of demographic questions and Goldberg General Health Questionnaire (GHQ-28). Data were analyzed using SPSS version 22. The significant level was considered at p = <0.05.

Results: Total 186(100%) HCWs with a mean age of 37.6±9.280 years among which 105(56.5%) males and 81(43.5%) females participated in the survey. Highest prevalence was found for social dysfunction 184(97.8%) followed by somatization, 169(92.8%). While comparing total GHQ-28 scores with independent variables, more than half of the HCW's 96(51.6%) had scored greater than 22. The mean of GHQ-28 of the total sample was 24.00±12.4956 (22.194-25.88). Significance difference was found between age group and anxiety (p=0.018), speciality of HCWs' with somatization and social dysfunction (p=0.041 and 0.037 respectively). All subscales and total GHQ scores were higher in male, medical officers and trainees. Those with less than 40 duty hours per week were more prone to psychological disorders

Conclusion: Pandemic has a significant risk for mental health of HCWs. Majority of HCWs are socially dysfunctional followed by somatization. When a pandemic is at its peak, proper mental health support program, personal and family protection assurance is highly recommended.

PFV 1-3 - 69549

["You're Just a Voice" : Examining Internal Medicine Residents' Experience Completing Goals of Care Conversations during the COVID-19 Pandemic](#)

Alison Lai University of Toronto, **Nadine Abdullah** University of Toronto

Background/Purpose: Understanding a patient's goals of care (GOC) is a standard component of an internal medicine consultation. The COVID-19 pandemic has resulted in systemic pressures that might affect GOC conversations. This qualitative study examines how the COVID-19 pandemic has affected internal medicine residents' GOC conversations.

Methods: Semi-structured interviews were completed with internal medicine residents (n=11) until thematic saturation was reached. Thematic analysis was used to identify salient themes.

Results: Residents self-described their GOC conversations in five steps: normalization of the conversation, introduction of expected clinical course, discussion of possible care plans, exploration of the patient's values and occasionally providing a recommendation. Residents described limited structured teaching around GOC conversations and instead relied on lived experience and role modeling to hone their skillset. Residents' ability to anticipate a patient's clinical course depended on their own medical and experiential knowledge. However, due to the uncertainty of clinical course and potential for rapid deterioration of patients with COVID-19, residents described an increased sense of urgency to have GOC conversations. Residents identified restrictive visitor policies as a significant barrier that contributed to dehumanization. Residents felt that poorly completed GOC conversations and resultant care plans contributed to moral injury.

Conclusion: The COVID-19 pandemic has constrained residents' ability to predict illness course and understand patient values, resulting in more urgent but potentially less effective GOC conversations. GOC conversations were identified as a contributor to moral injury during the COVID-19 pandemic. Future research should examine how challenging GOC conversations and subsequent outcomes might contribute to moral injury.

PFV 1-4 - 69494

[Digital dissection with CT scans enhances anatomy education: First-year medical students' perception of radiology teaching during the Covid-19 pandemic](#)

Rebecca Spouge University of British Columbia, **Kathryn E Darras** University of British Columbia, **Bruce B Forster** University of British Columbia, **Joana Gil-Mohapel** University of British Columbia, **Olivia Tsai** University of British Columbia

Background/Purpose: Digital dissection is performed with computed tomography (CT) scans on near life-size anatomy visualization tables and has been used to teach radiology anatomy at our institution. These sessions were pivoted to online delivery in response to COVID-19. The aim of this study was to evaluate students' perceptions of the educational value of the online, interactive radiology laboratories.

Methods: 290 first-year medical students participated in 10 weekly digital radiology anatomy laboratories, which employed 3D CT scans to emphasize the clinical applications of anatomy. Students reviewed the cases at-home prior to the lab on a mobile platform and labs were delivered synchronously via the Zoom platform in a facilitated large-group format. After the course, a voluntary anonymous online survey was distributed assessing learner satisfaction, task value, emotional achievement, and cognitive load.

Results: Survey response rate was 44%. Most participants reported the labs improved their knowledge of anatomy (82%), disease (81%) and clinical decision making (65%), including surgical knowledge (76%). The large group, synchronous learning format was found to be the most effective (68%). Positive emotional achievement was reported (mean 2.98). The extraneous cognitive load of the at-home mobile technology and lack of time were perceived as the greatest programmatic challenges.

Conclusion: Synchronous digital dissection labs were perceived as a valuable addition to the first-year medical curriculum, enhancing learners' clinical decision making and preparation for medical sub-specialties. This format of radiology anatomy education can be integrated into blended learning environments to provide students with additional learning opportunities.

PFV 1-5 - 69406

[Instagram as a tool for medical education during the COVID-19 pandemic](#)

Joelle Soriano University of Ottawa, **Laura Sheriff** Dalhousie University

Background/Purpose: The use of social media in medical education is innovative and evolving. Many mobile apps have been developed for medical education. Social media platforms are highly accessible and cost-efficient. When the COVID-19 pandemic changed medical education drastically by removing clerkship students from core rotations, we sought to develop a medical education social media tool to enhance medical student learning while on pause from clinical rotations, using similar mechanisms that led to the success of FOAM (Free Open Access Medical Education) resources.

Summary of the Innovation: We elected to implement an online FOAM resource using Instagram as our platform of choice due to its high popularity among medical students and ease of disseminating visual infographics. As senior medical students, we created visually engaging and educational infographics targeted towards junior medical students to prepare for their core clerkship rotations. Our posts emphasize high-yield questions and examinable topics. To date we have released 87 posts and accumulated more than 8,000 followers. On average, each post receives 60.1 likes, with a minimum of 26 likes and a maximum of 127 likes. On average, each post is shared by our followers 3.8 times and saved by followers 20.8 times.

Conclusion: Our innovation has had global impact and reach, demonstrating how we were able to combine our skillsets around medicine and of digital creation to fill a unique role in this virtual world. FOAM resources and digital scholarship continue to be embraced by today's generation of technologically inclined medical learners.

PFV 1-6 - 69680

[National experiences among sport and exercise medicine residents trained during the COVID-19 pandemic](#)

Adam Devon Western University, **Kyle Carter** Western University, **Graham Briscoe** Western University

Background/Purpose: Currently, the sport medicine community does not have a full understanding of the impact of the COVID-19 pandemic on the training of sport and exercise medicine (SEM) residents across Canada. We aimed to assess graduating SEM resident's preparedness for independent practice in the 31 CASEM core competencies of sport medicine across five domains: musculoskeletal assessment, exercise medicine, urgent/emergent conditions, anti-doping and mental health.

Methods: Data was collected in survey form by way of Likert-format questions and short answers.

Results: 12 of the 19 2020-2021 Canadian SEM residents completed the survey. We stratified the 12 participants into 2 groups for comparison: those with >50 hours of event coverage (n=4) and those with <50 hours of event coverage (n=8). The group with >50 hours of event coverage had higher mean Likert scores in all five domains: musculoskeletal assessment (4.63 vs. 4.33), exercise medicine (3.90 vs. 3.88), urgent/emergent conditions (4.06 vs. 3.62), anti-doping (3.92 vs. 3.42) and mental health (4.09 vs. 3.96).

Conclusion: Residents with decreased event coverage had decreased confidence, specifically in the domains of urgent/emergent conditions and anti-doping. Additionally, Residents identified novel learning experiences that may be helpful to mitigate the negative impact of the pandemic including programs facilitating travel for on-field experience, acute injuries clinics, on-field simulation, virtual care teaching and continuing involvement with varsity team coverage even after graduation.

PFV 1-7 - 69311

[Getting Physical with Medical Education: Exercise Based Virtual Anatomy Review Classes for Medical Students During COVID-19](#)

Charys Martin Western University, **Michele Barbeau** Western University, **Taniya Nagpal** Department of Kinesiology, Faculty of Applied Health Sciences, Brock University, **Nadeesha Samarasinghe** Western University

Background/Purpose: Due to COVID-19 campus closures, medical students faced the challenge of learning complicated anatomical concepts through virtual teaching methods, without access to cadaveric specimens. Studies have demonstrated that non-traditional learning environments may be used to supplement anatomy curricula. We sought to explore the use of physical activity in reinforcing musculoskeletal (MSK) anatomy course material by offering virtual exercise-based anatomy review classes to medical students prior to examinations.

Summary of the Innovation: Optional online group fitness classes were offered to second year medical students at one Canadian institution. Sessions were 30 minutes in length and consisted of various resistance or yoga exercises targeting different muscle groups. Key anatomical concepts were highlighted during each exercise and students were cued to recall this information at various points during the session. An anonymous, voluntary survey aimed at evaluating student perceptions of the classes was distributed electronically to participants following the sessions.

Conclusion: Twenty-six participants completed surveys. 84.6% of respondents agreed that the classes increased understanding of MSK anatomy. Survey respondents also indicated that the sessions improved activity levels (96.2%) and reduced stress (80.8%). All participants reported feelings of isolation during the pandemic and 92.3% agreed that the classes increased socialization. Overall, medical students surveyed were receptive to non-traditional methods of MSK anatomy content review. These results provide preliminary evidence to support the integration of exercise-based curriculum into undergraduate medical education. Although this innovation was designed to address the COVID-19 restrictions, we believe that it has potential as a learning tool beyond the pandemic situation.

PFV 1-8 - 69523

Point-of-care ultrasound teaching during the COVID-19 pandemic - high fidelity video streaming

Dennis Cho University of Toronto, **Matthew Nelms** University of Toronto, **Claire Heslop** University of Toronto, **Mirek Otremba** University of Toronto, **Lauren Wintraub** University of Toronto, **Ryan Daniel** University of Toronto, **Evan Tang** University of Toronto

Background/Purpose: Point-of-care ultrasound (POCUS) has been gaining popularity as an adjunct to traditional physical examination across disciplines in medicine. Hands-on learning has been the mainstay for teaching POCUS, however, the COVID-19 pandemic limited such opportunities. Didactic virtual lectures can provide theory but fall short on providing contextual information through real time examples. A method to teach in real time in a virtual environment is needed to meet the needs of learners. We assessed the feasibility and student perception of high-fidelity live-streamed POCUS teaching.

Summary of the Innovation: We conducted a pilot workshop which utilized a probe linked to a high-fidelity ultrasound video stream alongside real time video of the scanning from a 3rd person perspective. The project was piloted in a class of first year medical students at the University of Toronto (n=134). A voluntary post-session survey was distributed using an online platform.

Conclusion: Twenty-three students (17%) completed the voluntary post-session survey. All students (n=23) strongly agreed or agreed that the objectives of the session were achieved. In addition, 87% (n=20) of respondents strongly agreed or agreed that this approach allowed visualization of the technique. This initiative demonstrates the feasibility and acceptability of high-fidelity livestream POCUS as an educational modality. This approach could be applied in undergraduate medical education programs with distributed sites or when training practitioners in rural and remote settings. The results of this work are limited by the single cohort nature of this data and continued evaluation of this teaching method in other cohorts need to be completed.

PFV 1-9 - 69550

INCommunity: a student-led population health experience and its challenges and successes in adapting to the COVID-19 pandemic

Feriel Rahmani McGill

Background/Purpose: INCommunity is an IFMSA-Quebec immersion internship organized by and for medical students to broaden their appreciation of challenges faced by marginalized populations seeking healthcare. For a period of four weeks in the summer of pre-clinical years, medical students from across Quebec are invited to meet numerous healthcare providers and community organizations catering to the needs of five marginalized populations. With the emergence of COVID-19, this internship program which was previously based solely on in-person

interactions had to adapt innovatively to connect students with community partners.

Summary of the Innovation: We have implemented videoconferences with health professionals and representatives from community organizations, which allowed us to cross borders and recruit partners outside of Montreal, including Nunavut and James Bay. Medical students interacted with partners in various communities working with marginalized populations in a small group setting which allowed ample time for thought-provoking discussions. We also connected with community organizations offering online training to integrate structured learning activities to the students' experience. In-person observerships continued as well within the limits set by sanitary measures.

Conclusion: The integration of virtual conferences, workshops, and diversified training to the traditional in-person activities offered by INCommunity was extremely well-received by students. Feedback collected through weekly debriefs, post-internship survey and internship reports suggests general student satisfaction as well as a greater impact on students' interest in working with marginalized populations in the future. This hybrid structure will be maintained for the upcoming edition of INCommunity and beyond.

PFV-2 Curriculum

PFV 2-1 - 69499

"Helping them to see the world from a different set of eyes": Community organizations' perspectives of service learning at the University of Ottawa Faculty of Medicine

Craig Campbell University of Ottawa, **Laura Muldoon** University of Ottawa, **Annick Chenier** Merlia Coaching and Consulting, **Claire Kendall** University of Ottawa, **Michael Fitzgerald** Bruyere Research Institute

Background/Purpose: Community service learning is integral to the social accountability mission of medical schools, as it exposes students to the diversity of community needs and priorities. However, community organizations that host placements are rarely involved in the UGME curriculum.

Methods: As part of UGME curriculum renewal, we invited 103 service-learning host organizations to a 2-hour participatory guided virtual conversation to help the Faculty of Medicine understand the following question: What is a medical student who is able to identify and respond to the priority needs of your community? The process involved alternating small group and plenary discussions to share insights. We compiled the comments from these discussions and used the constant comparative method to determine overarching themes.

Results: Representatives of 15 organizations attended the meeting. We collected and analyzed 222 different participant comments. The overarching themes that emerged from our analysis included • There is the potential for mutual transformation between learners, the Faculty and communities • Certain processes emerged as important to the success of community service learning placements • There is greater potential for impact through placements where students take initiative and work on real problems • Communities valued longitudinal relationships with both students and the Faculty of Medicine

Conclusion: These community-based organizations find value in hosting CSL placements but have concerns about certain process aspects and about how well students are prepared and understand their roles. Many organizations suggested that these placements need to be embedded in longer-term relationships between community and campus and between organization and student.

PFV 2-2 - 69688

Creating the Future Leaders in Healthcare - Four for the Price of One: Weaving together Precision Medicine, Innovation & Entrepreneurship, Quality & Safety with Health Professions Education Leadership

Beverly Adams University of Calgary, **David Anderson** University of Calgary, **Kenna Kelly-Turner** University of Calgary, **David Keegan** University of Calgary, **Oleksiy Osiyevskyy** University of Calgary, **Tara Beattie** University of Calgary, **Ward Flemons** University of Calgary, **Leda Stawnychko** University of Calgary

Background/Purpose: Precision Health - the data-driven movement toward precise and personalized clinical-decision making - presents a tremendous challenge for medical educators and learners. The successful implementation of Precision Health in healthcare requires engagement far beyond the technologies themselves needing systems-level perspectives and training. Here, we present the curriculum structure of a new Precision Health graduate program that addresses this range of engagement so that Precision Health can realize its potential for influencing the future health of Canadians.

Summary of the Innovation: Taking a backwards-design approach, a diverse team of medical educators and other specialists at the University of Calgary designed, developed, and are now delivering a unique curriculum for a new graduate program in Precision Health with four interwoven specializations. We have brought together these four specializations that, together, embody a holistic approach to Precision Health education: Health Professions Education Leadership, Innovation and Entrepreneurship, Precision Medicine, and Quality and Safety Leadership. The resulting program fosters integration among students engaged in different specializations. The program culminates in substantial work-integrated learning opportunities, developed in partnership between the program, its faculty leaders, and each student.

Conclusion: While this program is relatively new, early enrolment and application interest, as well as detailed feedback from our first cohort of students, supports the premise that a cross-disciplinary engagement model is very well suited to addresses the training needs of an emerging, complex field like Precision Health.

PFV 2-3

68817

Trauma and Violence Informed Care Curriculum for Resident Physicians

Trystan Nault University of British Columbia, **Nadine Wathen** Western University

Background/Purpose: Medicine urgently requires a more equitable, intersectional approach to patient care that considers people's broader social context, such as their experiences of trauma and violence, including structural violence. For example, Indigenous Peoples continue to have disproportionately poor health outcomes, and access, facing intergenerational trauma secondary to colonization (1). Similarly, 1 in 4 women living in Canada will experience sexual assault in their lives and 30% of Canadians report experiencing physical or sexual abuse by an adult before the age of 15 (2). Trauma & violence informed care (TVIC) creates safety by understanding the impacts of trauma on health and behavior, and the intersecting impacts of structural and interpersonal violence (3). TVIC is linked to improved patient outcomes and provider well-being (4, 5. Emerging evidence indicates educating health and social services providers on TVIC can influence future practice (6).

Summary of the Innovation: A TVIC workshop was facilitated for 16 Family Medicine Resident Physicians using a flipped classroom, case-based approach. The curriculum was adapted from previous work from the Gender, Trauma & Violence Knowledge Incubator at Western

University, and the TVIC Foundations e-learning Curriculum housed at UBC, for synchronous delivery.

Conclusion: Knowledge of and comfort with integrating TVIC into practice, appreciation of structural violence, and improved capacity to make change within clinical settings and organizations were significantly improved following the administration of this workshop. Residents felt that there should be more space for topics like this in their overall curriculum. This workshop is an effective, scalable intervention that shows promise for broader uptake into medical education.

PFV 2-4

69458

Implementing a Fireside Chat Series as a Novel Approach to Teaching Health Equity in a Postgraduate Medical Education Academic Curriculum

Ceinwen Pope University of Toronto, **Rebecca Shalansky** University of Toronto, **Fiona Kouyoumdjian** McMaster University, **Aaron Orkin** University of Toronto, **Onyenyechukwu Nnorom** University of Toronto, **Donald Cole** University of Toronto

Background/Purpose: The University of Toronto's Public Health and Preventive Medicine Residency Program introduced a novel fireside chat series into our formal academic curriculum, focused on health equity. While calls for improving health equity-related competencies in public health training and leadership development pre-date 2020, the COVID-19 pandemic has highlighted the ongoing need for dedicated approaches to integrate equity into medical education.

Summary of the Innovation: The Health Equity Fireside Chat series was co-developed and co-delivered by program faculty and resident learners in Spring 2021, occurring entirely virtually due to COVID-19 restrictions. Sessions were structured around learning objectives that aimed to supersede the traditional paradigm of didactic content delivery focused on specific equity-deserving populations. Three weekly sessions took place combining a brief didactic component, facilitated questions, and interactive discussion, followed by a fourth session dedicated to reflective dialogue. The format was intended to support faculty sharing experiences, pearls, and pitfalls emerging across their equity work as well as resident engagement.

Conclusion: Feedback from debriefings and formal post-session surveys were overall positive and indicated the series successfully met learning objectives. There was consensus amongst organizers, speakers, and learners that the following elements of the fireside chat teaching method should be continued: learner engagement through the curricular development process, the fireside chat format, balance of theoretical and practical discussion including concrete examples of equity work, and engaged speakers with candid discussion. Modifications, specifically selecting faculty leads more systematically and including the voices of equity-deserving groups, should be made when there is the capacity to do so during non-pandemic times.

PFV 2-5

68604

Learning through application: exploring case and experience-based learning as an alternative to lecture based educational delivery

Dr. Roona Sinha University of Saskatchewan, **Dr. Regina Gjevre** University of Saskatchewan, **Rishi Thakkar** University of Saskatchewan

Background/Purpose: Medical students no longer desire to learn exclusively through didactic lectures, preferring active learning, requiring them to be both physically and mentally engaged. Studies have found that students who actively learn perform better academically. This study focuses on the proportions and nature of curriculum delivery

methodologies at the University of Saskatchewan, College of Medicine, as well as student perceptions on effectiveness of various teaching methods.

Methods: An internal curriculum delivery review was conducted to inventory the educational format within the curriculum. Additionally, student perspectives on teaching formats/methods were sought through both emailed survey and focus group. A total of 33 medical students participated in a survey, with 5 students participating in a focus group on curriculum delivery.

Results: Of 488.097 hours dedicated to organ system-based teaching in the preclerkship years of the program, 408.27 hours (83.6%) are didactic lectures. Student survey results indicated preference for learning about disease presentation and management in clinical settings over didactic lectures and focus group findings highlighted need to incorporate more case-based-learning opportunities and formative workbooks focused on disease presentation and management into the curriculum.

Conclusion: Current curriculum delivery methodological proportions in the preclerkship component of the program are heavily weighted towards lecture formats. Student perspectives identified in the survey and focus group conversations indicate a preference for more active learning strategies. Intentional diversification of curriculum delivery strategies within courses/modules may be a feasible transition approach for addressing this imbalance. Setting goals and timelines for the implementation of diversification may be a helpful next step for course teams.

PFV 2-6

68956

[Medical Student Career Perceptions of Cardiac Surgery and Cardiology](#)

Dominique de Waard Dalhousie University, **Andrew Moeller** Dalhousie University, **David Horne** Dalhousie University, **David Hodgson** Dalhousie University, **Sean Wang** Dalhousie University, **Benjamin Keefe** Dalhousie University, **Bright Huo** Dalhousie University, **Maggie Flemming** Dalhousie University

Background/Purpose: Reports of decreasing interest in cardiac surgery (CSx) compared to cardiology (CY) in the Canadian residency match may pose challenges to the workforce in CSx given an aging population. Without steady student interest in CSx, there is a risk CSx demands may not be met by the number of future cardiac surgeons. The aim of this study was to assess factors affecting medical students' interest in CY and CSx.

Methods: Medical students involved in the Pre-Clerkship Residency Exploration Program (PREP) and the Surgical Exploration and Discovery (SEAD) program at Dalhousie Medical School were surveyed. Participants were asked about any advice they had received that increased or decreased their interest in either speciality, the source of that advice, and whether they had been advised to pursue one over another.

Results: Sixty-six (78.6%) students completed the survey. Few students (4.5%) received advice increasing their interest in CSx compared to 34.8% in CY. Important sources of persuading advice included physicians, lectures, electives in the field, peers, and interest groups. More students received advice that decreased their interest in CSx (15.2%) compared to CY (3.0%). Peers were the most common source of this advice. Four students were directly advised to pursue CY over CSx.

Conclusion: Students form impressions of medical specialties early in their education. Experiences in lectures and clinical environments play an important role in this. Medical students may perceive that CY has an expanding scope coupled with a good work-life balance, while CSx offers a poor lifestyle with a diminishing scope.

PFV 2-7 - 69378

[An environmental scan of undergraduate medical education global health curriculum at the University of Ottawa](#)

Dr. Claire Kendall University of Ottawa, **Dr. Manisha Kulkarni** University of Ottawa, **Christopher Gupta** University of Ottawa, **Dr. Laura Muldoon** University of Ottawa, **Dr. Douglas Gruner** University of Ottawa

Background/Purpose: The COVID-19 pandemic exposed several social and health inequities globally, highlighting the importance of training medical students to address complex global health (GH) challenges. To achieve this, current medical school GH curricula may require adaptation. As part of our curriculum renewal process in the University of Ottawa (UOttawa)'s undergraduate medical education (UGME) program, this project aimed to map the current GH curriculum to national and international GH competency frameworks to identify strengths and gaps in the current content.

Methods: We generated a novel framework by merging the Association of Faculties of Medicine of Canada CanMEDS GH competencies with the GH competencies from the Consortium of Universities for Global Health (CUGH) toolkit. We then conducted an environmental scan to map UOttawa UGME learning objectives to the framework.

Results: We extracted 108 GH-related objectives (year 1: 42, year 2: 58, clerkship: 8) from the UGME curriculum. Most GH competencies were well addressed, demonstrating a strong curriculum with room for optimization in three CUGH domains: 'Capacity strengthening', 'Collaborations, partnering, communication', and 'Professional Practice'. Although the UGME objectives fulfilled the 'medical expert', 'communicator', 'professional' and 'advocate' CanMEDS roles well, less emphasis was placed on 'collaborator' and 'leader', and sometimes, the 'scholar' roles.

Conclusion: The UOttawa UGME curriculum sufficiently addresses most national and international GH competencies, with no major gaps. Through the curriculum renewal process, the UOttawa UGME program may augment our program with interprofessional training and experiential learning activities, leading to a more comprehensive curriculum and further emphasize our Faculty of Medicine's social accountability mandates.

PFV 2-8

69421

[Adapting Competency Based Medical Education to Low Resource Settings: A Systematic Review](#)

Catherine Binda University of British Columbia, **Emily Joos** Vancouver General Hospital, **Irena Zivkovic** University of British Columbia, **Lydia Feng** University of British Columbia

Background/Purpose: Competency Based Medical Education (CBME) emphasises learner-centeredness, ability, and curricular outcomes. CBME curricular components have been adopted by many well-resourced medical schools; however, little is known about the implementation of CBME in rural and Low-Middle- to Low-Income Countries (LMICs).

Methods: A search of MEDLINE (Ovid), EMBASE (Ovid), Eric (EBSCO), and CINHIL (EBSCO) was conducted in April, 2021 in consultation with a healthcare librarian. Three independent reviewers evaluated the 95 unique captured abstracts for explicit inclusion and exclusion criteria. Following a thematic analysis, reviewers conducted data analysis on the 28 articles included in the final review.

Results: Overall, 26/28 studies reported at least one benefit to CBME. Reported benefits included improved learning outcomes (n=12), increased learner independence (n=11), improved learning process (n=10), improved capacity of the local healthcare system (n=9), and

improved preparation for professional practice (n=8). Overall, 24/28 articles reported at least one challenge to the implementation of CBME in low resource settings. Challenges included a lack of support for trainers (n=13), learner adaptation (n=11), lack of resources (n=11), difficulty assessing trainees (n=7), and external factors (n=5).

Conclusion: The implementation of CBME curricula is feasible and advantageous in low resource settings, including LMICs and Rural HICs. Pursuing solutions to CBME implementation barriers is an active and worthwhile focus in the field of medical education. Solutions to CBME implementation barriers must be pursued at the level of the student, educator, and institution.

PFV-3: Black health & wellness / social accountability

Virtual 1

PFV 3-1

69584

Vers un mentorat adapté pour l'admission et le maintien des étudiants noirs en médecine

Daniel Hubert University of Ottawa, **Julia Kemzang Emogang** University of Ottawa, **Gaelle Bekolo** University of Ottawa, **Salomon Fotsing** University of Ottawa, **Simpson Ewurabena** University of Ottawa, **Johanne Mathieu** Université de Sherbrooke

Background/Purpose: L'encadrement par un mentor joue un rôle déterminant dans l'expérience d'apprentissage des étudiants en médecine. La plupart des facultés de médecine canadiennes ont un programme de mentorat offert à leurs étudiants. Ces programmes sont souvent peu adaptés aux étudiants noirs. Ce projet vise à identifier les stratégies de mentorat jugées efficaces pour les étudiants de minorité ethnique, notamment les étudiants noirs, dans un contexte d'éducation médicale.

Methods: Nous effectuerons une revue systématique à partir de bases de données telles que MEDLINE, EMBASE, CINAHL, PsycINFO, Eric, Education Source ainsi qu'à partir de la littérature grise. Les articles seront évalués pour leur qualité puis traités dans Zotéro et Covidence. Seuls les articles incluant une intervention seront considérés. La mesure de l'impact des interventions sera estimée suivant l'échelle de Kirpatrick. Une synthèse descriptive sera effectuée selon le niveau d'éducation, le schéma de l'étude, la taille de l'échantillon, la stratégie de mentorat, les outils utilisés, la durée de l'intervention, l'impact de l'intervention ainsi que les statistiques utilisées pour la mesure de l'impact.

Results: Nous prévoyons que les résultats nous permettront d'identifier les stratégies efficaces de mentorat adapté aux étudiants noirs.

Conclusion: Cette étude permettra d'une part d'identifier des outils nécessaires à la mise en place d'un programme de mentorat pour les étudiants noirs en médecine, mais aussi de fournir des axes de discussion sur la compétence culturelle des médecins et la formation de ceux-ci sur le sujet.

PFV 3-2

68945

Creating Curriculums: Creating a Culturally Safe Indigenous Health Curriculum at Memorial University of Newfoundland

Diana Deacon Memorial – University of Newfoundland, **Carolyn Sturge Sparke** Memorial – University of Newfoundland, **Russel Dawe** Memorial – University of Newfoundland, **Susan Avery** Memorial – University of Newfoundland, **Eric Smith** Memorial – University of Newfoundland, **Francoise Guigne** Memorial – University of Newfoundland

ackground/Purpose In light of the Truth and Reconciliation Commission: Calls to Action and the Association of Faculties of Medicine of Canada Joint Commitment to Action on Indigenous Health, Memorial University's Family Medicine (FM) residency program partnered with Indigenous leaders to educate residents about the unique needs of Indigenous peoples. An interdisciplinary Indigenous Health Curriculum Committee (IHCC) comprised of Indigenous physicians and social scientists came together and developed a set of Indigenous Health learning objectives and curriculum for FM residents. The curriculum was mapped against the Indigenous Physicians Association of Canada and Royal College of Canada's "Cultural Safety in Practice: A Curriculum for Family Medicine Residents and Physicians", "First Nations, Inuit and Métis Health Core Competencies for Continuing Medical Education" and "College of Family Physicians of Canada CanMEDS-Family Physician 2020 Indigenous Health Supplement".

Summary of the Innovation: The Indigenous Health curriculum was launched in 2020. Indigenous Elders and community leaders from all Indigenous groups in the province are consulted and collaboratively determine the issues of health and wellbeing they wish to educate FM residents about. The FM residency program, with Memorial's Postgraduate Medical Education Office, facilitates teaching by Indigenous community members for all postgraduate residents during orientation to residency. FM residents also complete an online Indigenous Health module and academic half day session.

Conclusion: Preliminary feedback from residents and Indigenous collaborators suggests that this process has been effective in developing an Indigenous Health curriculum at Memorial.

PFV 3-3

69092

Promising practices for arts-based programming aimed at improving cultural humility in medical students

Niveditha Pattathil Queen's University, **Christine Law** Queen's University, **Allison Morehead** Queen's University

Background/Purpose: Striking disparities in health outcomes continue to persist for equity-deserving groups in Canada, especially within Indigenous, racialized, and immigrant communities. Many medical school curricula have begun to include courses aimed at addressing structural health inequities, bias, discrimination, and cultural humility in medicine. Art is an excellent modality for education in these areas as it blends visual information with subjective interpretation and the opportunity to understand multiple perspectives via differing cultural lenses.

Methods: A literature review of peer-reviewed academic literature and grey sources was conducted. Databases searched were MEDLINE, EMBASE, APA PsychINFO, COCHRANE, Queen's OMNI, and Google Scholar. Of the total 486 citations exported for title and abstract screening, 41 advanced to full-text screening, and 21 were included in the final data extraction.

Results: All included programs found success in using arts-based teaching to promote cultural humility. Five themes were identified from the literature describing (i)unique qualities of arts-based programming that promote development of cultural humility, (ii)arts-based activities and exercises found to be effective when teaching medical learners, (iii)short- and long-term learning outcomes arising from arts-based teaching, (iv)specific pedagogical considerations when using the arts to teach in medical education, and (v)validated methods of measuring changes in cultural humility and competence in medical learners.

Conclusion: Arts-based teaching shows promise as a unique learning modality for medical students to improve their cultural awareness and

humility. This literature review highlights the role of interdisciplinary approaches to medical education, thereby informing future research and action to ameliorate health outcomes for equity-deserving communities.

PFV 3-4

69398

Addressing Race, Culture, and Structural Inequality in Schulich School of Medicine Pre-Clerkship Cases of the Week.

Max Stone Western University, **Teresa Van Deven** Western University

Background/Purpose: In the Schulich School of Medicine's pre-clerkship curriculum, topics of equity, diversity and inclusion (EDI) have traditionally been siloed to courses separate from topics of clinical expertise. This separation has the unintended consequence of conveying to students that topics of EDI are less important. Teaching EDI in medical education is improved when it is infused throughout the curriculum consistently.

Methods: Using Krishnan et al.'s framework for evaluating cases, pre-clerkship teaching cases were evaluated for representation and inclusion of EDI topics in cases. Recommendations for improvements were then made for cases in Schulich's Foundations of Medicine course.

Results: 44 "patients" are discussed across Schulich's pre-clerkship cases. Twenty (44%) of these patients can be classified as visible minorities per the 2016 Canadian Census Profile. In these patients, social history was provided to students in 90% of cases, and social and structural determinants of health (SSDOH) were addressed in these patients 50% of the time (compared to 79% and 29%, respectively, in non-minority patients).

Conclusion: Overall, Schulich's cases of the week succeed in portraying minority identities in cases, avoid reductionist and essentialist portrayals of minority identities, and avoid considering race as a genetic factor of disease. Schulich cases could further improve by recognizing upstream factors of disease, considering how to address SSDOH, and recognizing and addressing unconscious biases perpetuated in cases. Appropriately integrating EDI into medical expert sections of the curriculum provides students with necessary skills required to be compassionate and inclusive physicians in training, which is an essential part of their professional identity formation.

PFV 3-5

69434

Engaging medical learners in building a socially accountable scholarship community

Erin Cameron Northern Ontario School of Medicine, **Nusha Ramsoondar** Northern Ontario School of Medicine, **Chandelle Mensour** Northern Ontario School of Medicine, **Kirstie Taylor** Northern Ontario School of Medicine, **Brianne Wood** Thunder Bay Regional Health Research Institute, **Sadie Barnett** Northern Ontario School of Medicine, **Sophia Myles** Northern Ontario School of Medicine

Background/Purpose: Canadian medical schools have widely accepted the World Health Organization's definition of social accountability. For medical students, emphasis is placed on practicing as a socially accountable physician by delivering health services that respond directly to the current and anticipated needs of the practice community. However, there is a gap in the literature on how to meaningfully engage medical students in socially accountable scholarship practices in order to gain the knowledge necessary to practice in a socially accountable manner.

Summary of the Innovation: In the summer of 2021, medical learners at the Northern Ontario School of Medicine participated in various research projects and, as part of their summer research internships, engaged in a

collaborative weekly reflection with researchers and postdoctoral fellows about socially accountable research. Probing questions included such things as what makes research socially accountable and how can researchers be more socially accountable. Participants also explored what a socially accountable scholarship community looks like and challenges and opportunities to engage learners in building this community. Collaboratively, medical learners and researchers shared their individual reflections and established a thematic framework of what a socially accountable scholarship community in medical education could look like.

Conclusion: Engaging medical learners in a socially accountable scholarship community provides medical learners with a supportive, collaborative environment that allows them to explore socially accountable research practices. We suggest that medical schools seeking to strengthen medical learners' ability to conduct socially accountable research explore a collaborative scholarship community approach.

PFV 3-6

69461

Developing and implementing a novel intersectionality-based peer mentorship program at a Canadian medical school

Jordynn Klein University of Toronto, **Emily Kornelsen** University of Toronto, **Shereen Khattab** University of Toronto

Background/Purpose: Research suggests that medical school can present unique challenges for students from marginalized and underrepresented backgrounds. Near-peer mentorship is an underutilized but effective model of supporting minoritized trainees, as student mentors are uniquely situated to provide guidance and support on equity-related issues encountered throughout training.

Summary of the Innovation: The Near Peer Equity Mentorship Program (NPEMP) is an innovative peer-to-peer mentorship initiative to support minoritized medical students. NPEMP pairs participating first-year students with volunteer upper-year mentors for one academic year. In addition to students from traditional equity-deserving groups, this program recruits students with experiences not captured by other mentorship initiatives, such as those who are caregivers, parents, first-generation scholars, socioeconomically disadvantaged, or living with disabilities/chronic illness. Students wishing to participate submit a self-description of their social identity and mentorship interests, and are subsequently matched based on mentorship goals and relevant lived experiences. This unique approach attempts to reflect the real-world complexity and intersectionality of social identity, acknowledging and incorporating the impact of social identity upon one's professional identity. NPEMP participants have reported an improved sense of inclusion and belonging in medical school as well as improved self-efficacy in overcoming equity-related challenges in training. 71 first-year students have participated over the first two years of the program, many of whom have returned to the program as mentors.

Conclusion: Near-peer mentorship is an effective method to support minoritized and underrepresented students in navigating the challenges of medical training. NPEMP may serve as a model for other institutions to support students experiencing equity-related challenges in medical education.

PFV 3-7

69565

[The art of transformation: A critical narrative review of the arts and humanities in medical education for transformative learning and social advocacy](#)

Snow Wangding Western University, **Javeed Sukhera** Western University, **Benjamin Vipler** University of Colorado School of Medicine, **Tracy Moniz** Mount Saint Vincent University, **Paul Haidet** Pennsylvania State University College of Medicine, **Lorelei Lingard** Western University

Background/Purpose: The arts and humanities hold transformative potential in medical education. Research suggests that arts and humanities-based pedagogies may facilitate both personal and professional transformation in medical learners, including with the social advocacy domain. Despite their potential, a review of such efforts has yet to be undertaken. Therefore, we sought to identify how the arts and humanities may facilitate transformative learning and social advocacy in medical education.

Methods: Building on a 2019 scoping review by Moniz et al, we conducted a critical narrative review seeking theoretical and practical examples from the literature on how the arts and humanities may promote transformative learning and social advocacy in medical education. Through a search of 8 electronic databases, we identified 27 articles and conducted both descriptive and interpretative analyses of their relation to key tenets of transformative learning, including: disorientation/dissonance, critical reflection, skill development, and action.

Results: When used to foster transformative learning and social advocacy, we found that the arts and humanities are used predominantly in the elicitation of disorientation and dissonance, rather than applied to critical reflection, facilitated dialogue, or action. Additionally, we found very little practical guidance on how to integrate the arts and humanities in curricula to foster social advocacy through transformative learning.

Conclusion: The tremendous potential of the arts and humanities to foster transformative learning in social advocacy remains somewhat constrained. Future research must consider how novel approaches that draw from the arts and humanities may be used for the persistent engagement of transformative learning in medical education.

April 24, 2022, 13:45 MST

PFV-4: Program development

Virtual 1

PFV 4-1

69525

[Competence By Design for Fellowship Programs and Transdisciplinary Brain Medicine: A Scoping Review](#)

Athena Ko McGill, **Paula Gosse** University of Toronto, **Dr. Sara Mitchell** University of Toronto, **Dr. Sarah Levitt** University of Toronto

Background/Purpose: Individuals with complex brain disorders often require care from specialists across disciplines; however, training for such has been traditionally siloed into separate programs. To bridge this gap, we are developing a Brain Medicine Fellowship to train physicians capable of understanding and treating complex brain disorders through a transdisciplinary lens. As medical education in Canada transitions into Competence By Design (CBD), fellowship programs are still early in this uptake. We aim to review the existing competency-based medical education (CBME) literature, with a focus on brain medicine specialties (i.e., neurology, psychiatry, neurosurgery, physiatry, geriatrics) to inform CBD fellowship development.

Methods: We conducted a scoping review of articles pertaining to the use of CBME in postgraduate medical education programs.

Results: This literature review returned 754 unique publications, of which 71 articles were deemed relevant. Three specific foci emerged from the literature: CBME development and implementation, CBME in fellowships, and CBME in brain medicine specialties. We found a paucity of research on CBME in brain medicine specialties, and even more so in fellowships. Moreover, the majority of CBME curricula and associated entrustable professional activities (EPAs) focused on procedural skills.

Conclusion: As our understanding of complex brain disorders continues to grow, there will be an increasing need for healthcare specialists equipped with cross-disciplinary expertise. The findings of our scoping review can help inform the creation of competencies and EPAs beyond the development of the Brain Medicine Fellowship, but to fellowship programs in general, and how these need to be uniquely adapted for this level of training.

PFV 4-2

69367

[Multi-Stakeholder Validation of EPA Frameworks for two Geriatrics-Focused Residency Programs](#)

Derek Fisk University of Manitoba, **Ben Clendenning** University of Manitoba, **Phil St. John** University of Manitoba, **Jose Francois** University of Manitoba

Background/Purpose: Entrustable Professional Activities (EPAs) have become widely used within Competency-Based Medical Education (CBME) for the training and evaluation of residents. One effective way of developing robust and socially accountable EPA frameworks is to consult a variety of relevant stakeholders. Little is known about the effectiveness of incorporating multiple stakeholder groups in the validation of EPAs. Here, we seek to validate two EPA frameworks developed for a Geriatrics Specialty program and a Care of the Elderly Enhanced Skills program using online focus groups consisting of five stakeholder groups.

Methods: Participants were recruited to take part in one of five online focus groups, one for each stakeholder group (physician faculty, residents, non-physician healthcare professionals, managers/administrators and patients). Each group met one time for 90 minutes over ZOOM . Meetings were facilitated by a medical student using a semi-structured interview script. All meetings were recorded using ZOOM and transcribed and coded with Nvivo.

Results: Five themes arose from stakeholder feedback. Together, the themes suggest that successful EPAs must neither be too specific nor too expansive in scope (Specific vs. Broad), clearly delineate appropriate means of evaluation (Operationalization), indicate specific clinical settings in which each EPA should be evaluated (Setting), require trainees to collaborate with other professionals when it would optimize patient care (Interprofessional functioning), and teach trainees ways to advocate for their patients' health (Advocacy).

Conclusion: Multi-stakeholder analysis yields diverse feedback that can help make EPAs clearer, easier to use in evaluation and more socially accountable.

PFV 4-3

69352

Implementation and Evaluation of a Multi-Disciplinary Surgical Resident Training Pilot Program using Soft-Embalmed Cadavers

Alwyn Gomez University of Manitoba, **Terry Li** University of Manitoba, **Sabine Hombach-Klonisch** University of Manitoba, **Alexa Hryniuk** University of Manitoba

Background/Purpose: The training of surgical residents typically relies on hands-on experience in the operating room (OR). The fast-paced, high-stakes environment in the OR, however, can limit the exposure trainees receive, especially when OR time is scarce. We aimed to supplement resident training by providing a low-stress learning environment that leverages soft-embalming techniques for practicing surgical procedures.

Summary of the Innovation: Two cadavers were embalmed using the "Halifax" protocol, which left tissue pliable, closely mimicking living tissue in colour and texture. These cadavers were assigned to surgical programs according to their region of interest (head to neurosurgery, chest to thoracic surgery, limbs to plastic surgery, etc.) A total of 32 trainees from seven surgical programs attended 18 sessions over a period of three weeks. Each session was facilitated by a clinician for procedural guidance and an anatomist for anatomy review. The sessions were coordinated to maximize the utilization of the soft-embalmed cadavers, while minimizing interference between procedures of different surgical programs. A survey composed of Likert-scale questions was administered at the end of the program to collect feedback and gauge interest for future iterations. Attendees thought the cadavers provided a realistic hands-on experience; 95% of trainees felt improvement in their anatomical understanding, while 92% felt more confident in surgical procedures presented.

Conclusion: The clinical anatomy pilot program optimally utilized soft-embalmed cadavers and allowed trainees to practice surgical procedures in a low-stress environment. It demonstrated the need for such learning opportunities and provided a model for the development of future cadaveric training programs.

PFV 4-4

69445

Evaluating InSIGHT: Mixed methods evaluation of an experiential learning program

Kelly Green Memorial – University of Newfoundland, **Jill Allison** Memorial – University of Newfoundland

Background/Purpose: Historically, global health experiences have been developed through a colonialist lens at the expense of the host communities. InSIGHT was developed with the intent of actively deconstructing these ideas and building a truly equitable partnership for medical education. The purpose of this study is to explore the educational, professional, and personal impacts of the InSIGHT program as a global health experiential learning opportunity for pre-clerkship medical learners. This study will evaluate the sustainability and equitable design of the InSIGHT program through comparison to the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) standards by John Crump and Jeremy Sugarman.

Summary of the Innovation: MUN offers pre-clerkship students the opportunity to participate in a 4-week non-credit elective in partnership with the Patan Academy of Health Sciences (PAHS) in Nepal. Students were exposed to clinical and community experiences in various parts of healthcare including physicians, government agencies and advocates.

Conclusion: InSIGHT participants reported transformative learning experiences through a variety of contexts, including the impact of geography, education, and gender on access to healthcare. They demonstrated greater respect for the innovation and competency of their Nepali colleagues. Students also noted that the critical analysis and reflexive skills they developed through InSIGHT are valuable regardless of future speciality. The strength of InSIGHT's teaching lies in its equitable, anti-colonialist partnerships with PAHS and community groups for curriculum development. InSIGHT offers a template for developing other global health experience programs aligned with WEIGHT standards. Areas for improvement including language training, expanding post-InSIGHT debrief and strengthening partnerships with clinical preceptors.

PFV 4-5

69293

Longitudinal training program for undergraduate medical students increases self-perceived confidence and preparedness to engage in advocacy

Connie Li McMaster University, **Elizabeth Rowe** Memorial – University of Newfoundland, **Justin Shapiro** University of Toronto, **Amelia Srajer** University of Calgary, **Courtney Hardy** University of Toronto, **Mary Boulos** McMaster University, **Samer Salameh** McGill, **Jason Speidel** University of British Columbia, **Jessica Hearn** Memorial – University of Newfoundland, **Sehjal Bhargava** University of Saskatchewan, **Shazeen Suleman** University of Toronto

Background/Purpose: With variable advocacy training opportunities in medical schools across Canada, the Longitudinal Advocacy Training Series (LATS) was developed by the Canadian Federation of Medical Students (CFMS) to provide medical students with a free advocacy training program. We explored how participating in LATS influenced students' confidence and preparedness to undertake advocacy work.

Methods: Participants completed a survey during program registration and before and after each workshop. Perceived confidence, preparedness and understanding of advocacy topics were assessed using a 5-point Likert scale. Responses were analysed using descriptive statistics.

Results: At the time of registration, participants rated advocacy as important in their career (4.63/5) . However, they rated their self-perceived confidence in engaging with advocacy low (2.51/5). Specifically, participants reported feeling least prepared for government-related advocacy (2.10/5), and most prepared to identify personal biases and privilege (3.61/5). After attending a workshop, participants reported feeling more prepared to advocate on the presented topic (4.5/5). At the end of the series, 65.5% of participants felt prepared to advocate for patients in clinical environments (30.1% neutral; 4.4% disagree), and 61.9% for government-level change (29.2% neutral; 8.8% disagreed).

Conclusion: Our study found that Canadian medical students self-reported an increase in confidence and preparedness to advocate upon completion of the program. LATS has filled a gap in Canadian medical education and medical faculties should work collaboratively with students to further advance and standardize advocacy training for Canada's future physicians.

PFV 4-6

69299

[Evaluating the feasibility of a national advocacy training series for Canadian medical students](#)

Sehjal Bhargava University of Saskatchewan, **Jessica Hearn** Memorial – University of Newfoundland, **Jason Speidel** University of British Columbia, **Mary Boulos** McMaster University, **Courtney Hardy** University of Toronto, **Samer Salameh** McGill, **Amelia Srajer** University of Calgary, **Connie Li** McMaster University, **Elizabeth Rowe** Memorial – University of Newfoundland, **Justin Shapiro** University of Toronto, **Shazeen Suleman** University of Toronto

Background/Purpose: According to the CanMEDS framework, a primary role of the physician is to advocate, yet Canadian medical school advocacy curricula varies widely. The Canadian Federation of Medical Students (CFMS) Longitudinal Advocacy Training Series (LATS) was developed to provide free, skills-based advocacy training to Canadian medical students. A certificate of completion was offered to students who attended 3 workshops and submitted a reflection. The present study aims to quantify the logistical and financial feasibility of LATS and its acceptance among Canadian medical students during its first year.

Methods: Data on participant registration and completion of LATS were tracked using Google Forms from September 2020 to May 2021. Direct and indirect costs were measured by the LATS organizing team. Descriptive statistics were used to summarize data.

Results: 1140 Canadian medical students registered for LATS, representing 9.7% of all Canadian medical students. There were 227 completion certificates awarded, therefore approximately 20% of registered participants completed LATS. LATS hosted 25 virtual workshops resulting in direct program costs of $625 CAD for speaker honorariums. Indirect costs included time from 10 medical student organizers and 25 workshop facilitators. Advertising occurred via social media and email at no cost. Workshops were offered through free school-affiliated Zoom accounts.

Conclusion: During its first year, LATS was a low-cost program to implement. LATS attracted nearly 10% of all Canadian medical students, of which 20% of these students completed the program indicating good program uptake and satisfaction. LATS was a feasible method of providing advocacy training to medical students.

PFV 4-7

69695

[Developing an Extra-Curricular Global Health Program for University of Toronto Medical Students](#)

Zainab Doleeb University of Toronto, **Natasha Dhingra** University of Toronto, **Nikki Rousta** University of Toronto, **Krish Bilimoria** University of Toronto

Background/Purpose: Despite significant technological and medical advances in recent decades as well as the increasing economic interdependence of nations, health disparities between so-called developed and developing countries continue to widen. Now more than ever, medical education should include global health curricula that informs and encourages the next generation of physicians to build competencies in global health within a strong ethical framework. In response, many medical schools are striving to expand their curricula to cultivate global health-minded physicians. Within Canada, global health education varies across schools with some programs offering only two hours of lectures. To this end, students and faculty developed the Temerty Faculty of Medicine Global Health Education Program (GHEP) for undergraduate medical students.

Summary of the Innovation: The program was developed for pre-clerkship students following a widely-distributed need-assessment survey, with twenty-two students admitted into the program for the 2020-2021 academic year. The program was structured as sixteen modules taught weekly for 2.5 hours; students were expected to complete independent readings and quizzes. Learning objectives of the GHEP included global health inequity advocacy, patient care in low-resource settings, and methods to address global health ethical dilemmas.

Conclusion: The majority of students found that the program met the stated learning objectives and would recommend the program to colleagues. Students reported program strengths to include diversity and expertise of speakers, breadth of content, and relevance of themes. Weaknesses included Zoom fatigue and insufficient guidance on actionable next steps. The program is running for its second year, having incorporated student feedback from its inaugural year.

PFV 4-8

69635

[Exploring the Role of the Humanities in Palliative Medicine Residency Programs](#)

Christopher Barnes University of Ottawa, **Michel Shamy** University of Ottawa, **Rayan Delbani** University of Ottawa, **Brian Dewar** University of Ottawa

Background/Purpose: The humanities can aid in the development of important skills and tools in the training of physicians. Because of the nature of their work, palliative medicine (PM) residents are expected to apply humanities-based skills frequently in their clinical work and are likely be in a situation to use these skills to support their own self-care. Our project aimed to explore the role of the humanities in PM residency programs across Canada.

Methods: A literature review was completed to appraise the current knowledge on the use of the humanities in PM training. The training standards of both the College of Family Physicians of Canada (CFPC) and the Royal College of Physicians and Surgeons of Canada (RCPSC) were reviewed. A cross-sectional survey targeting current PM residents and staff physicians across Canada was conducted.

Results: Evidence to support the use of humanities in PM training was identified in both undergraduate and postgraduate training, with most being at the undergraduate level. Multiple humanities objectives exist in the current CFPC and RCPSC PM training standards, primarily in ethical, cultural, and spiritual domains. Ninety-two participants completed the survey, of which a high level of respondents felt the humanities have an important role in postgraduate medical education and PM residency training. Similarly, the majority felt their own PM residency program would benefit from more humanities content, particularly in the areas of arts/literature and ethics/philosophy.

Conclusion: We hope our results can guide future studies on better understanding why and how more humanities content can be added in PM residency programs.

PFV-5: UGME

Virtual 1

PFV 5 -1

69703

[Evaluating a simulation-based patient safety workshop for undergraduate medical students: reaction and learning](#)

Khalid Aziz University of Alberta, **Naheed Rajabali** University of Alberta, **Safeena Kherani** Al Jalila Children's Speciality Hospital, **Marty Koyle** University of Toronto, **Nichole Pereira** Queen's University, **Tamizan Kherani** University of Alberta, **Zaheen Khimji** St. George's University

Background/Purpose: Patient safety (PS) incidents are within the top 3 causes of mortality in the Canadian health care system. However, there is a paucity of medical student education in this area. A hands-on 4 hour simulation-based PS workshop was developed to teach medical students at the University of Alberta how to recognize and systematically approach PS incidents in order to mitigate them. . The purpose of this research study is to assess for changes in medical students' knowledge, confidence, and attitudes about the PS simulation- based workshop.

Methods: PS knowledge and confidence questionnaires were administered medical students before and after the 4-hour workshop to determine students' knowledge and confidence in performing a PS assessment. Questions were based on the competences required by the undergraduate medical education program. A paired t-test and Mann-Whitney non-parametric rank comparison was done on the knowledge and confidence questionnaire respectively.

Results: In regards to the knowledge the multiple choice questionnaire, a paired t-test was completed and the Students' showed an improvement their knowledge base (pre 81.0% to post 92.6%; p=0.000). For the pre- and post workshop confidence questionnaires, students' showed an increase confidence in all 4 domains (p<=0.001).

Conclusion: This novel interactive PS workshop was able to improve the knowledge and confidence of medical students in this area Acquisition of this skill will hopefully help future clinicians improve care of their patients.

PFV 5 -2

69149

[Improving Resuscitation Preference Conversations through the Development of an Educational Video](#)

Ayesha Kalim Western University, **Lakhdeep Brar** Western University, **Mark Goldszmidt** Western University, **Ravi Taneja** Western University, **Kristen Bishop** Western University

Background/Purpose: Resuscitation preference conversations (RPC) are challenging: infrequently held, quality is variable and documented preference may not align with expressed wishes. While video decision aids (VDA) can support patient education, currently developed RPC VDA inaccurately frame the decision dichotomously (full code vs. do-not-resuscitate (DNR)), and many are implicitly and directionally biased towards DNR. Our purpose was to develop an evidence-informed VDA to help patients and families participate more meaningfully in conversations with their physicians and, ultimately, make more informed value-concordant choices.

Summary of the Innovation: We used an evidence-based approach to VDA development. To begin, existing literature on challenges and best practices for holding RPC was reviewed. Next, educational objectives were iteratively developed in consultation with key clinical and Patient-Advisor stakeholders. These were then used in the development of a script. Using Microsoft Powerpoint©, a video-storyboard and accompanying handout

was then developed and shared with a further group of patient-advisors and clinicians leading to the development of our proof-of-concept video.

Conclusion: Patient-Advisors and clinicians reported that the video achieved its stated objectives and, importantly, helped the patient-advisors to recognize the various resuscitation options that, despite having had conversations about in their own patient journeys, they had not previously understood. They also felt the VDA could be used to empower them to participate more meaningfully in RPC with their physicians. Many lessons around VDA development were learned relating to conveying clarity about complex information and incorporating emotional appeal to improve the receptivity of the resource. Next steps will involve testing the developed video in clinical settings.

PFV 5 -3

69666

[Using speed networking event formats to connect medical students and researchers](#)

Jessica Tao University of Ottawa, **Marc-Olivier Deguise** University of Ottawa, **Stephanie Lau** University of Ottawa, **Hannah Cummings** University of Ottawa, **Marc Zucker** University of Ottawa, **Gabrielle Weiler** University of Ottawa

Background/Purpose: Every year, medical students actively seek research opportunities. Research achievements in medical school are often highly regarded by residency programs, and may predict career success in academic medicine. When students and researchers collaborate, students gain invaluable skills and mentorship while researchers progress in their academic goals. At the University of Ottawa, innovation was needed in facilitating introductions between physician researchers and medical students, as ineffective methods were being used.

Summary of the Innovation: "Meet the Researcher", a one-hour annual speed networking event, was established in 2017 to enhance interactions and decrease search time for well-matched partnerships between researchers and pre-clerkship medical students. In 2017, groups of students rotated between researchers for 4-minute networking sessions. Based on feedback, the event evolved into a one-on-one format, where up to 20 students per year interacted with up to 5 researchers for 4-6 minutes in 2018-2020. Due to the COVID-19 pandemic, the event was held virtually in 2021 and one-on-one interaction times were increased to 9 minutes. We evaluated "Meet the Researcher" via a survey. A total of 34 researchers and 91 students have participated. 25% of researchers matched with a student in 2017, while 68% of researchers matched or were finalizing plans with a student after the event format change between 2018-2021.

Conclusion: "Meet the Researcher" is a novel, efficient and preferred platform for researchers and students to connect and establish partnerships. This event requires a low degree of coordination and would be easily organized by medical students and hospital staff as either an in-person or virtual event.

PFV 5 -4

68772

[A Canadian Survey of Medical Students and Undergraduate Deans on Managing Patients with Obesity](#)

Nathan Katz Queen's University, **Olivia Lovrics** McMaster University, **Boris Zevin** Queen's University

Background/Purpose: With over 26% of Canadian adults living with obesity, undergraduate medical education (UGME) should prepare medical students to manage this chronic disease. It is unknown how management of obesity is taught within the UGME curricula in Canada.

This study (1) examined the knowledge and self-reported competence of final-year medical students in managing patients with obesity, and (2) explored how this topic is taught within UGME curricula in Canada.

Methods: We distributed two online surveys: one to final-year medical students, and another to UGME deans at the 9 English-speaking medical schools in Canada. Medical student survey assessed students' knowledge and self-reported competence in managing patients with obesity. Dean's survey assessed how this topic is taught within the UGME curriculum.

Results: A total of 133 (6.7%) and 180 (9.3%) out of 1936 eligible students completed the knowledge and self-reported competence parts of the student survey, respectively. Mean knowledge score was 10.5 (2.1) out of 18. Students had greatest knowledge about etiology of obesity and goals of treatment, and poorest knowledge about physiology and maintenance of weight loss. Mean self-reported competence score was 2.5 (0.86) out of 4. Students felt competent assessing diet for unhealthy behaviours and calculating body mass index. Five (56%) out of 9 deans completed the Dean's survey. A mean of 14.6 (5.0) curricular hours were spent teaching how to manage patients with obesity.

Conclusion: Undergraduate medical students in Canada have limited knowledge and feel inadequately prepared to manage patients with obesity. Changes to UGME curricula may help address this gap in education.

PFV 5 -5

69673

[L'interdisciplinarité dans les sciences de la santé : Un partage de connaissances théoriques et pratiques en anatomie entre les étudiants en physiothérapie et les étudiants en médecine](#)

Marie-Ève Lepage Levesque UCAQ, **Maryse Renald** UCAQ**, Michaël Théberge** UCAQ, **Laurent Dansereau** Université de Sherbrooke, **Jean-Philippe Paquin** Université de Sherbrooke, **Mozelle Théoret** UCAQ, **Alexis Dufour** Université de Sherbrooke

Background/Purpose: La collaboration interprofessionnelle est un élément central dans la prise en charge des patients. Cette compétence devrait s'inscrire précocement dans la formation des professionnels de la santé. Considérant que les problèmes musculosquelettiques sont fréquents en médecine, un enseignement offert par des étudiants en physiothérapie permettrait d'approfondir les différentes connaissances en anatomie et les techniques de palpation des étudiants en médecine inscrits aux études médicales précliniques.

Summary of the Innovation: Le présent projet étudiant s'échelonne sur quatre ateliers animés par les étudiants à la maîtrise en physiothérapie. Chaque atelier couvre une région anatomique vue en classe (membres supérieurs et inférieurs, rachis et système nerveux). Les 34 étudiants sont jumelés en duo (médecin, patient) pour la palpation. L'agenda des ateliers s'inscrit dans un objectif de complémentarité avec le cursus de l'Université de Sherbrooke. Le contenu des ateliers a été créé par une collaboration entre les étudiants en physiothérapie et en médecine afin d'établir un lien clinique avec les pathologies fréquentes.

Conclusion: Suite à la première activité sur le rachis, les données recueillies à l'aide d'échelles de Likert à 5 niveaux démontrent une appréciation de l'activité (100%), une meilleure confiance à faire l'examen physique (91,3%), une consolidation des connaissances en anatomie (95,6%) et une meilleure compréhension de la prise en charge des physiothérapeutes (87%). Ce projet réalisé sur le campus délocalisé de Saguenay prouve que ce modèle se veut une formule accessible et interdépendante au cursus formel. La finalité du projet est également d'assurer la pérennité et de créer une dynamique d'échange entre les programmes en santé.

PFV 5 -6

68503

[Comparison of Clerkship Directors' expectations of physical examination skills with PoCUS skills using the RIME framework](#)

Valerie Desjardins University of Ottawa, **Dr. Warren Cheung** University of Ottawa, **Dr. Carolina Souza** University of Ottawa, **Dr. Isabelle Burnier** University of Ottawa, **Dr. Barbara Power** University of Ottawa, **Dr Paul Pageau** University of Ottawa, **Dr. Michael Woo** University of Ottawa

Background/Purpose: Point-of-care ultrasound (PoCUS) is being incorporated into Undergraduate Medical Education. It is a useful adjunct to the physical examination that can improve clinical judgement and patient satisfaction. uOttawa has physical examination skills objectives throughout the four years of medical school. In 2018, formal PoCUS skills objectives were established for pre-clerkship students. There are no formal PoCUS objectives for clerkship students. The current expectations regarding PoCUS skills at uOttawa medical school has not been described.

Methods: An expert pilot-tested, bilingual on-line survey was sent to all clerkship directors (23) at uOttawa in December 2019 to compare the clerkship directors' expectations of physical examination skills with PoCUS skills, before and after completing clerkship. The response rate was 60.9% (14/23). The survey utilized the RIME Framework to categorize the expectations: none, reporter, interpreter, manager, educator.

Results: With regards to PoCUS skills, 100.0% of directors had no expectations or reporters for students when starting clerkship. At clerkship completion, 33.0% of directors felt that students should be interpreters or managers for PoCUS skills. For physical exam skills, 82.8% of directors had no expectations or expected students to be reporters when starting clerkship. At graduation, 77.5% of directors expected students to be interpreters, managers, or educators. Clerkship directors have low expectations of PoCUS skills despite formal PoCUS objectives.

Conclusion: Enhanced communication and targeted education of directors could improve the PoCUS curriculum and provide continued learning for medical students at the uOttawa.

PFV 5 -7

69319

[The Impacts of Weekly Academic Tutorials and Peer Mentorship on Academic Successes of First Year Medical Students](#)

Dorsa Mavedatnia University of Ottawa, **Justen Choueiry** University of Ottawa, **Joelle Soriano** University of Ottawa, **Chris Ramnanan** University of Ottawa

Background/Purpose: First year medical students face significant levels of stress, particularly from the increased workload associated with the transition from university to medical school. At the University of Ottawa MD Program, second year medical students run The Student Mentoring Centre (SMC) - an initiative designed to academically support first-year medical students. We deliver weekly tutorial sessions summarizing topics covered in class and reviewing practice questions to enhance student learning and comprehension of course content. The objective of our study was to assess the impact the Student Mentoring Centre has on first-year students' learning and to assess whether students benefit academically.

Methods: Ethics approval was received from the University of Ottawa. A questionnaire was developed and distributed to first year medical students, consisting of 14 questions exploring students' perceptions on the services delivered by the SMC.

Results: 72 students participated in the survey. 89% of surveyed students used our services frequently, 93% found didactic weekly tutorials very helpful, 99% found exam review sessions very helpful, and 96% reported the SMC helped them succeed academically. 99% of the students believed

that the SMC is an important component of medical education. 96% of students reported that it helped them succeed academically. 79% of students reported that it reduced their stress levels.

Conclusion: Tutorials and content review reduced stress and supported students through their academic endeavors. Other medical schools are encouraged to adopt similar academic mentorship programs to help better prepare first year medical students for the academic rigors of medical school and reduce burnout.

PFV 5 -8

69391

An Innovative Goals of Care Communication Workshop for Fourth Year Medical Students

Emma Ernst Tufts University School of Medicine, **Tamara Vesel** Tufts Medical Center, **Grace Wang** Tufts University School of Medicine

Background/Purpose: The need for palliative care services has grown with the demographic transition and advances in medical technology. Effective communication between physicians and patients is an essential component of medical care yet has not been a core of medical education. An innovative, interdisciplinary workshop was designed to equip medical students with palliative care communication skills.

Summary of the Innovation: Since 2018, we have offered a day-long workshop to fourth year medical students to enhance communication skills with patients with advanced illnesses, families, and an interdisciplinary team and emphasize primary palliative care competencies. 186 students have participated to date. The curriculum is hands-on and case-based. Students receive immediate, individualized feedback from professional actors, interdisciplinary faculty, and a bereaved family member. Case scenarios include patients of all ages and in varying life-threatening situations and healthcare settings. The curriculum was adapted during the COVID-19 pandemic to emphasize strategies for verbal and non-verbal communication while wearing personal protective equipment. We administered pre- and post-workshop surveys and used an observation tool. Students have reported increased comfort with palliative care communication, including participation in goals of care and end of life conversations and explaining hospice services. Preliminary qualitative analysis of surveys demonstrates that students understand qualities needed to be effective during difficult conversations.

Conclusion: Participating students have advanced their palliative care skills and gained insights into qualities that health care professionals must adopt to communicate appropriately with patients, families, and healthcare teams. This one-day workshop can serve as a framework for much-needed medical student palliative care training.

PFV-6: PGME

Virtual 1

PFV 6-1

68853

Goal-setting on a Geriatric Medicine Rotation

Evelyn Cheung University of Toronto, **Dov Gandell** University of Toronto, **Jillian Alston** University of Toronto

Background/Purpose: Formal goal-setting has been shown to enhance performance, stimulate collaboration between teachers and learners and improve educational experiences. This pilot study aims to describe the feasibility, barriers, and successes of a standardized goal-setting form on a Geriatric Medicine rotation. As well, this study examines the content and quality of goals selected by residents.

Methods: Since March of 2018, all residents rotating through Geriatric Medicine at Sunnybrook Health Sciences Centre (SHSC), Toronto, are asked to complete a standardized goal-setting form. Forms collected during the pilot period were analyzed for content and quality. Residents were invited to complete an anonymous survey to gather feedback.

Results: The goal-setting form was completed by 26 of 44 (59%) scheduled residents during the pilot period. Explanations for the low completion rate included limited time, the voluntary nature of the initiative, and trainee absence. Reasons for difficulty in achieving goals included lack of time and limited clinical opportunity. Although only 59% of residents completed the intervention when the form was completed, most goals were specific (71 of 77; 92%). Highlighting the importance residents place on the exposure to other competencies while learning Geriatric Medicine, 35 of 77 (45.5%) goals were not related to medical expert competency.

Conclusion: This pilot outlines the outcomes of a goal-setting form during a Geriatric Medicine rotation. Of residents who completed the form, identification of very specific goals was possible. Iterative quality improvement and a qualitative study on the goal-setting process are both underway.

PFV 6-2

69475

Beyond the duty of call: Examining Psychiatry residents' experiences of on-call education

Niloofar Izadi University of Toronto, **Sarah Levitt** University of Toronto, **Karen Wang** University of Toronto, **John Teshima** University of Toronto

Background/Purpose: Though the on-call experience has been examined in some medical disciplines (Joffe et al. 2006; Palakshappa, Carter, & El Saleeby 2015), there has been little data published about the educational experiences on-call in Psychiatry residency programs. This exploratory study seeks to examine psychiatry residents' experience of on-call education.

Methods: A cross-sectional online survey about the extent of supervision on-call was sent to Psychiatry residents at the University of Toronto. Focus group interviews explored survey topics in detail. The online survey was analysed using descriptive statistics, and we applied a thematic analysis to the focus group interviews.

Results: 62/108 psychiatry residents responded to the online survey. 65% reported never receiving direct observation or feedback on clinical assessments. The majority of residents indicated a desire for more supervision. Qualitative thematic analysis of the focus group interviews found the on-call educational experience was mediated by residents' relationships with their supervisors, the learning environment, and individual features of the learner. Residents expressed that they wished for an increased educational structure to the on-call experience that recognizes their developmental level in residency. The quality of the relationship with the on-call supervisor was clearly identified as a factor that could contribute to or mitigate the distress associated with the on-call experience.

Conclusion: Our study identified that the on-call setting is currently an underdeveloped educational opportunity within Psychiatry training. Attention should be paid to the relationship between resident and supervisor in the on-call setting to help prevent resident distress and burnout.

PFV 6-3

69049

[Medical Residents' Understanding of Child Maltreatment: Impacts, Recognition and Response.](#)

Melissa Kimber McMaster University, **Harriet MacMillan** McMaster University, **Anita Acai** McMaster University, **Megan Laupacis** McMaster University, **Meredith Vanstone** McMaster University

Background/Purpose: Child maltreatment (CM) is a serious public health problem with devastating effects on individuals, families, and communities. Educationally, it represents a sensitive issue that requires training. Resident physicians report feeling inadequately trained in identifying and responding to CM, which is important given their role as mandated reporters. The purpose of this study is to assess the educational needs of residents by exploring their understanding of the impacts of CM, and their perception of their role in recognizing and responding to CM.

Methods: This study is secondary analysis of a subset of qualitative descriptive data obtained from a larger project on family violence education. Twenty-nine residents within pediatric, family medicine, emergency medicine, obstetrics and gynecology, and psychiatry residency programs in Alberta, Ontario, and Québec participated in semi-structured interviews to explore their ideas, experiences, and educational needs relating to CM. Conventional content analysis guided the development of codes and categories.

Results: Residents identified several educational needs. While they had good knowledge about the impacts of CM and their duty to recognize CM, there was less consistency in how residents understood their role in responding to patients who had experienced CM. Residents identified the need for more education about recognizing and responding to CM, and the need for educational content to be responsive to training, patient and family factors, and systemic issues.

Conclusion: Findings of this study underscore the need for better training in response to CM for residents. Future educational interventions may consider a multidisciplinary, experiential approach.

PFV 6-4

69250

[Goal-Setting on a Geriatric Medicine Rotation: A Qualitative Study](#)

Jillian Alston University of Toronto, **Dov Gandell** University of Toronto, **Emilia Kangasjarvi** University of Toronto, **Ryan Brydges** University of Toronto

Background/Purpose: While many residency rotation objectives and entrustable professional activities are formally reviewed prior to each rotation, trainees are rarely asked and guided to set specific goals. This study aimed to examine structured goal-setting among diverse residents (e.g. internal medicine, family medicine, palliative care, psychiatry and geriatric medicine) rotating on 4-week Geriatric Medicine rotations between 2018 and 2021.

Methods: Our structured goal-setting program included: 1) A pre-rotation structured goal-setting form; 2) an initial meeting to discuss and clarify each resident's goals; 3) A 35-item Dutch Residency Educational Climate Test (D-RECT) questionnaire, evaluating a recent non-geriatric rotation; 4) A mid-rotation check-in; and 5) an post-rotation D-RECT questionnaire and semi-structured interview. We used constant comparative analytic methods to generate themes describing residents' perceptions and experiences.

Results: From 12 residents' interview data, we developed the following thematic categories: 1) Setting goals: personal intentions for rotation, 2) Enacting goals: challenges with adaptation 3) Assessing goals: reliance on self-assessment of achievement. We identified potential mediators including how social and program factors influenced residents' goal selection, their perceived impacts on learning, and their willingness to adapt their goals. D-RECT scores were higher for the geriatric medicine rotation.

Conclusion: In implementing this brief, structured goal-setting intervention in a high-volume, low resource setting, we found that the early effective co-construction between attending staff and residents dissipated over time. In particular, our study offers insights on how to sustain such co-construction through improvements to the clarity of goal-setting instructions, and increases in attendings' attention to ongoing and adaptive goal-setting practices.

PFV 6-5

69221

[Impact of training site on examination scores in distributed medical education: a systematic review](#)

Ilun Yang McMaster University, **Sahil Sharma** McMaster University

Background/Purpose: While the Distributed Medical Education (DME) model allows different educational experiences of value in academic health centres (AHC) and non-AHC sites, students should not be disadvantaged academically on the basis of their training site. A systematic review was conducted to identify the impact of training site on examination scores of medical students in a DME model.

Methods: OVID-MEDLINE and EMBASE databases were searched. Eligible studies included any articles published between 2008 and 2020 inclusive that compared standardized examination scores of medical students trained at an AHC site versus their peers trained at an affiliated non-AHC site.

Results: 514 articles were generated in the initial search, and seven studies were included in the analysis. The studies included several different specialties. A school-specific written assessment was used in five of the seven studies, an Objective Structured Clinical Examination (OSCE) was used in four studies, and National Board of Medical Examiners (NBME) assessments were used in two studies. In all seven studies, there was no significant difference between students based at AHC vs. non-AHC training sites in their performances on written assessments (school-specific or NBME) or OSCEs.

Conclusion: In a DME model, AHC vs. non-AHC training site does not impact students' performance on examination scores. This equivalence was seen regardless of specialty and examination format.

PFV 6-6

69516

[Trends in the Proportion of Women Speakers at North American Allergy and Immunology Conferences over a 12-year period](#)

Anne Ellis Queen's University, **Mary Foley** Queen's University, **Lori Connors** Dalhousie University, **Kyla Hildebrand** University of British Columbia, **Kristin Hunt** Queen's University

Background/Purpose: Women in medicine have often been underrepresented at medical conferences. Aurora et al. (2020) examined the proportion of female speakers across multiple specialties and evaluated factors that may have led to this disparity. This study excluded the field of Allergy and Immunology and did not analyze how these factors have changed over the last decade.

Methods: We thus aimed to examine the distribution of invited speakers by gender over time at three North American conferences including the Canadian Society of Allergy and Clinical Immunology (CSACI), American Academy of Allergy, Asthma, and Immunology (AAAAI), and the American

College of Allergy, Asthma and Immunology (ACAAI). This retrospective longitudinal analysis used conference programs from 2008 to 2020 to analyze the gender of invited speakers, panelists, and planning committee members. This data was then compared to publicly available data on composition of the specialty by gender in Canada and the US.

Results: Results show that female speakers at CSACI, ACAAI and AAAAI conferences have historically been lower than male speakers and underrepresented compared to specialty composition. However, this gap has been closing over the last decade (CSACI: 19% 2008 to 54% 2020, ACAAI: 16% 2008 to 37% 2020). This coincides with the increase in number of women on the planning committee (CSACI: 9% 2008 to 54% 2020, ACAAI: 11% 2008 to 45% 2020).

Conclusion: This study sheds light on the evolution of women speaker representation at Allergy and Immunology conferences with factors that may help us to address these gender inequities in the future.

PFV 6-7

69670

[Multi-stakeholder validation of Entrustable Professional Activities in Family Medicine](#)

Tamara Buchel University of Manitoba, **Ben Clendenning** University of Manitoba, **Jose Francois** University of Manitoba

Background/Purpose: The development of Entrustable Professional Activities (EPAs) has generally focused on expert panel approaches, which are often limited to physician stakeholders. Optimally, a much wider group of stakeholders should be consulted and include all people gaining value from trainees' patient care performance. The present study explores the perceptions of a variety of stakeholder groups regarding the relevance and comprehensiveness of EPAs developed for a Canadian Family Medicine Residency program.

Methods: Through the use of an online survey consisting of dichotomous and open-ended questions, this study explored and compared the perceptions of a variety of stakeholder groups (policy makers, health administrators, health professionals, medical teachers, and public) regarding the relevance and comprehensiveness of 25 EPAs articulated by a family medicine residency program.

Results: Agreement on appropriateness of EPAs ranged from 90% to 100%, displaying a high level of alignment between stakeholders regarding the appropriateness of the 25 articulated EPAs. Stakeholders identify two gap areas within the EPA framework: 1) provision of surgical assistance and 2) addictions care

Conclusion: The present study demonstrates that a multi-stakeholder approach can feasibly be used to validate an EPA framework. In addition to confirming that a previously articulated set of EPAs largely reflected the range of activities expected of family physicians serving a population, it identified a number of potential area of improvements in the framework.

April 24, 2022, 14:00 MST
PFV-7: Pot Pourri
Virtual 1

PFV 7-1

69628

[Stories Side-by-Side: A comparative narrative analysis of stories about end-of-life care](#)

Tracy Moniz Mount Saint Vincent University, **Carolyn Melro** Dalhousie University, **Chris Watling** Western University

Background/Purpose: As the focus on end-of-life care intensifies in Canada, so does the need to understand more deeply the experiences of physicians, patients, and informal caregivers. Educating for and practicing patient- and family-centered care at end of life requires a shared understanding of illness and its meaning and impact. The narratives of physicians, patients, and informal caregivers each offer a distinct perspective, yet comparative research is uncommon. This study compares public discourses on end-of-life care by these groups.

Methods: An archive of first-person written narratives published between January 1, 2010 and December 31, 2019 was created through searching public domains (e.g., national newspapers), personal blogs, and academic journals. A comparative narrative analysis was conducted for recurring patterns of content (e.g., theme, agency) and strategy (e.g., arc, characterization).

Results: A total of 352 narratives were analyzed (113 physician/medical learner, 149 caregiver, 65 patient, 25 other). Themes of grieving loss, living with uncertainty, coping with change, and cultivating resilience intersected between groups but manifested in unique ways. For instance, with grief, physicians wrote about recurring grief over losing patients, caregivers described grieving the loss of a companion and their own identity, and patients grieved the loss of physical abilities resulting from illness. All groups told stories from the patient's perspective foremost and positioned the illness as the antagonist of the story.

Conclusion: Exploring end-of-life care from the perspectives of those closest to the experience offers insight into dying with dignity in ways that may inform physician education and practices that are compassionate, personalized, and participatory.

PFV 7-2

69074

[Narrative as a tool to reflect around caring and the future profession for physical therapy students](#)

Maria Jesus Mena Universidad Del Desarrollo, **Carla Benaglio** Universidad Del Desarrollo

Background/Purpose: The COVID-19 pandemic imposed challenges for health career students. A student support program in our institution aimed to give learning and coping strategies to students to confront better the current situation. Narrative medicine emerged as a motivational strategy for student's reflection about caring and their future profession. Observe how students visualize care in physical therapy profession and if narrative enriches their speech about caring.

Methods: We organized 6 distant learning 1-hour sessions for each group. The facilitator presented the activity's framework, within a safe environment for the students. A test was done before and after the intervention, asking students the question: "What do you think is the most important aspect of your future profession?". Qualitative methodology was used to identify the expressions that they used to refer to their profession. A second anonymous questionnaire asked about lessons learned and suggestions for future activities.

Results: In the pre-test the students referred to ideals and future hopes regarding their profession. In the post-test they were more precise and focused on caring, adding reflections about the importance they felt in focusing on patient's quality of life and seeing them as "complete persons", not just seeking a cure for a "diagnosis" or "disfunction", as in the pre-test. Students reflect deeper using phrases like "doing good for their patient and society" and valued a protected space to reflect and discuss which they felt contributed to their wellbeing. They recognized a value in the narrative methodology used and suggested face to face learning and smaller groups to facilitate interaction in future activities.

Conclusion: Students need protected space in their curricula to reflect around a narrative related with their future profession. Narrative is a creative and powerful model that contributes to student's reflexion and wellbeing.

PFV 7-3

69449

[Transition to best practices in residency selection at Université de Montréal: How clear are program descriptions on the Canadian Residency Matching System (CaRMS) website?](#)

Crystel Saado Université de Montréal, **Florence Durocher** Université de Montréal, **Dr Jean-Michel Leduc** Université de Montréal

Background/Purpose: Each year, medical students carefully prepare their residency programs application by browsing program descriptions on the CaRMS website. In order to continuously improve the practices in selection of candidates for postgraduate medical education, this study seeks to assess the quality of program descriptions on the online platform.

Methods: An analysis grid was created based on best practices in residency selection and a local consensus. Using this grid, two assessors independently rated the quality of the 24 R1 entry program descriptions of Université de Montréal presented on the CaRMS platform. An estimation of compliance rate with best practices was then carried out.

Results: Overall, 90% of programs clearly defined the objectives of their selection process. Admissions committees were clearly presented for 50% of the programs and included individuals of various profiles, but more rarely from community-based hospitals. The "do not rank" criteria and the use of external data for the ranking process were well-specified (92% and 88%, respectively). Elements assessed in the candidate's file were well-described, but only 17% of programs defined their weighting. Nearly 80% of programs did not detail the interview process and the use of standardized vignettes or grids was rarely specified. One in three programs explicitly presented the method used to generate the ranking list.

Conclusion: There are areas for improvement in program descriptions, particularly regarding the disclosure of the ranking method, and the weighting assigned to the elements in the candidates' files. These observations will help create tools for programs to optimize the information transmitted on the CaRMS platform.

PFV 7-4

67804

[Reproductive Endocrinology and Infertility Fellowship Program Website Assessment](#)

Mehr Jain University of Ottawa, **Julia Rodrigues** University of Ottawa

Background/Purpose: Given the importance of online resources and the implications of these shortcomings for prospective applicants, we sought to assess the comprehensiveness of REI fellowship program websites in Canada and the United States. If the need is identified, improvement in the content of information on REI fellowship programs websites would allow prospective applicants to obtain accurate information in a more efficient manner.

Methods: Online American and Canadian REI program websites were individually assessed using a 72-point criteria checklist that was adapted from previous studies employing similar methodology and criteria to assess fellowship websites in various medical specialties. Program websites were grouped based on geographic location.

Results: We identified 49 REI fellowship programs in the US and 9 in Canada. 100% of the Canadian programs and 95.9% of the US programs had an accessible website. The mean score across all American websites was 61.47% and 47.68% for the Canadian websites, which is significantly lower ($p < 0.000$). The "wellness" subcategory had the highest prevalence of criteria (85.33%) across all program websites, whereas the 'fellow information' subcategory had the lowest score (20.0%).

Conclusion: Canadian and US REI fellowship websites overall lacked content relevant to prospective applicants. Program websites can improve sections on clinical work, current fellows and details on research requirements and opportunities to increase applicant engagement and recruitment.

PFV 7-5

68855

[Voisins de la rue](#)

Romain Ouellet-Paradis Université de Montréal, **Florence Vielhaber** Université de Montréal, **Valérie Schur** Université de Montréal, **Audrey Beaumier** Université de Montréal

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 du Québec.

Summary of the 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, plus de 20% des étudiants entre l'année préparatoire et la fin du préclinique ont participé.

Conclusion: En diffusant cette initiative au Canada, l'importance d'un accès aux soins égal pour tous sera mis de l'avant.

PFV 7-6

68948

MedVert

Sophie Fournier-Marcoux Université de Montréal, **Valérie Schur** Université de Montréal

Background/Purpose: Les étudiants en médecine sont sensibles à l'impact énergétique néfaste qu'ont les hôpitaux sur l'environnement, ces derniers génèrent d'immenses quantités de déchets et sont responsables d'une bonne part de la formation de gaz à effet de serre au Canada. Il est urgent que chacun fasse sa part afin de freiner la crise climatique et c'est la mentalité que possède notre population étudiante. C'est pourquoi le comité MedVert œuvre auprès du pavillon étudiant de médecine ainsi que de l'hôpital Ste-Marie afin d'instaurer des initiatives éco-responsables pour réduire l'impact néfaste environnemental du milieu de la santé.

Summary of the Innovation: Le comité MedVert est formé de 16 étudiants de médecine de l'Université de Montréal au campus de Mauricie. Le comité compte parmi ses projets: un système de compostage collectif, le verdissement de la cafétéria de l'hôpital (par l'ajout d'options végétariennes sur le menu et le retrait des contenants de styromousse), une communauté active sur les réseaux sociaux partageant leurs astuces vertes, des capsules informatives sur le mode de vie éco-responsable, le réaménagement extérieur (ajout d'espaces verts et de support à vélo sécuritaire) et intérieur (ajout de plantes détoxifiantes dans les espaces communs) du pavillon de médecine et le suivi de la consommation d'énergie.

Conclusion: Les étudiants sont sensibilisés aux principes généraux du développement durable, que ce soit dans leur mode de vie quotidien ou dans leur milieu d'apprentissage et futur emploi qu'est l'hôpital. Le partage de nos accomplissements avec le reste du Canada permettra d'inspirer d'autres étudiants à se mobiliser pour la santé de notre précieuse planète.

PFV 7-7

69392

Can we improve training on medical interpretation service use in medical education? A scoping review on the barriers and facilitators of service uptake

Thuy-Nga (Tia) Pham University of Toronto, **Tiffany Ni** University of Toronto, **Shamir Malik** University of Toronto, **Jae Lee** University of Toronto, **Sheila Yu** University of Toronto

Background/Purpose: Canada's population with limited English proficiency (LEP) has steadily increased over the past decades. While medical interpretation services (MIS) are essential to providing patient-centred care, they remain underutilized. The lack of education on accessing MIS during clinical encounters contributes to underuse, leading to poorer clinical outcomes and patient safety. This scoping review summarizes the current literature on challenges and facilitators to MIS uptake in clinical settings, including patient education and HCP training.

Methods: Studies from MEDLINE, Embase, CINAHL, PsycINFO, Web of Science, and CENTRAL were searched from database inception to July 2021 following the scoping review methodology by Arksey & O'Malley (2006). All English language articles investigating barriers and facilitators to MIS uptake were included. Additionally, all educational material targeting HCPs, such as training programs and interpretation technologies, were included. All styles of literature, including grey literature, were examined.

Results: Our search yielded 8783 results. We screened 6466 abstracts and 281 full-text articles. 99 results were included for final review. Common barriers to MIS uptake included unawareness of available MIS among HCPs, financial costs of service use, and disruption to HCP workflow. Facilitators included educational intervention for HCPs, increased funding for promotional campaigns, and technology such as audiovisual interpretation devices. Specifically, numerous studies found that increased education of HCPs improved existing MIS uptake.

Conclusion: This review identified several factors influencing MIS uptake by HCPs. HCP training and continuing education is a notable and effective target to improve usage of existing MIS with the potential to improve patient-centred care and outcomes.

PFV 7-8

69704

Creating a green shift in medical education and the healthcare system : a literature review of initiatives and methods to make hospitals more sustainable

Tharaniya Vallipuram McGill, **Nissrine Ammari** Université Laval, **Sara Medina Kasasni Medina Kasasni** Université de Sherbrooke, **Yseult Gibert** McGill, **Yousra-Imane Benaskeur** Université de Montréal, **Florence Chiarella** Université de Sherbrooke, **Jeanne Lavallée** Université Laval, **Anne-Sophie** Lê Université de Montréal, **Maria Alexandra Rosca** Université de Montréal, **Koorosh Semsar-Kazerooni** McGill

Background/Purpose: The healthcare sector contributes almost 5% of the global greenhouse gas emissions (GHG). Canada ranks third in the world for per capita GHG emissions from healthcare. This significant contribution to climate change and the immense health threat it represents should prompt a reflexion on the sustainability of our health facilities, and on the virtually inexistent measures to educate the healthcare workforce on this pressing issue.

Methods: A literature review was performed to identify initiatives and methods to achieve greener health facilities and care. Sixty-two articles were included for full-text screening, and seven reports and toolkits from the grey literature were also included.

Results: Out of seven main contributors to the high ecological footprint of hospitals identified, the most recurring being operating rooms and waste management. Recommendations included : improved sterilizing methods, optimized operating room protocols limiting unnecessary waste, and implementation of rigorous waste disposal protocols at an institutional level. Above all, active training, education, and increased awareness of the health workforce were most paramount to the promotion of planetary health. Along with directly tackling the first barrier to aforesaid recommendations (i.e ignorance), educating trainees and staff also created space for additional spontaneous greening initiatives and efforts from individuals and administration.

Conclusion: In the post-COVID era, a green shift must be an integral part of health systems to limit the impact of the climate change crisis. Green hospitals will contribute to the health of the population at multiple levels, and healthcare students need to be actively involved in shaping their future workplaces and practices.

PFV-8: Feedback

Virtual 1

PFV 8-1

69364

Exploring the quality of narrative feedback provided to residents within ambulatory care settings during the COVID-19 pandemic.

Sara Awad Queen's University, **Ramana Appireddy** Queen's University, **Jessica Ho** Queen's University, **Rebecca Leclair** Queen's University, **Boris Zevin** Queen's University, **Heather Braund** Queen's University, **Jennifer Bunn** Queen's University, **Ekaterina Kouzmina** Queen's University, **Steve Mann** Queen's University, **Samantha Bruzzese** Queen's University

Background/Purpose: The COVID-19 pandemic decreased opportunities for residents to participate in ambulatory care, placing increased emphasis on the quality of feedback provided. We aimed to explore the quality and content of narrative feedback provided to residents during ambulatory care to identify strengths, weaknesses and opportunities for improvement within competency-based medical education (CBME).

Methods: We recruited residents from the Departments of Surgery (DoS) and Medicine (DoM) at Queen's University and sought their consent to retrieve their Entrustable Professional Activities (EPAs) assessment for ambulatory care completed between July 2020 and February 2021. We used thematic analysis and the Quality of Assessment for Learning (QuAL) tool; Evidence (0/1/2/3), Suggestion (0/1), Connection (0/1) to analyze the content and quality of the narrative feedback.

Results: Thematic analysis of narrative feedback (n=41) identified three major themes: Communication, Diagnostics/Management and Next Steps. There were significant differences between DoM and DoS in the mean quality of feedback scores for different domains of the QuAL tool: Evidence (mean=2.1(standard deviation=1.3) vs 1.3(1.1); p=0.08), Suggestion (0.4(0.5) vs 0.3(0.5), p=0.53), Connection (0.4(0.5) vs 0.1(0.3); p=0.04). The quality of feedback was unchanged for direct vs indirect observation, nor for the time to feedback completion.

Conclusion: Quality of narrative feedback varied across assessments in an ambulatory setting; however, feedback from the DoM tended to be of higher quality than feedback from the DoS. This suggests a potential role for additional faculty development to improve the quality of feedback provided to residents.

PFV 8-2

69623

Factors which Impact Feedback Processing by Faculty in Health Professions Education: Effects on Faculty Feedback Systems and Development

Parnian Pardis McMaster University, **Vanessa Munford** McMaster University, **Yusuf Yilmaz** McMaster University, **Teresa Chan** McMaster University

Background/Purpose: Faculty members in Health Professions Education (HPE) are inundated with feedback, which they are expected to use to undergo development as clinicians and teachers alike. However, faculty are not immune to their habitual behaviours and mindsets which often reinforce individuals' resistance to change, with numerous studies identifying challenges in faculty perception and reaction to feedback. To understand the lens with which faculty respond to feedback, factors which impact their processing must be explored.

Methods: Faculty members at McMaster University were interviewed using a semi-structured guide to determine feedback they value and factors which impact their understanding of this feedback. A generic qualitative method was employed for thematic analysis of participant interviews and themes were subsequently generated by all authors.

Results: Participants included 14 faculty members at McMaster University, of which 5 (38%) were male. Five themes influenced how faculty members process feedback, including: nature of data insight and its utility; impact of others, and of culture within the healthcare setting; obstacles to effective processing; and comparisons of self-performance with others.

Conclusion: Feedback to employees and leaders permits ongoing development of self-improvement and competence. However, language used during feedback delivery is critical, and should recognize differences in response to feedback based on generation of training. Regardless of the characteristics of the feedback recipient, specific and actionable feedback is desired to generate learning plans and identify mentorship. A positive cultural change in response to feedback can be anticipated with the shift towards competency-based medical education, changing how faculty members utilize their feedback.

PFV 8-3

69164

Development and implementation of a tool for faculty evaluation of residency programs

Namita Sharma McMaster University, **Stefanie Lee** McMaster University, **Shauna Kennedy** McMaster University, **Crystal Fong** McMaster University

Background/Purpose: Faculty are core stakeholders in residency programs, and their input is key to continuous quality improvement. However, a literature review demonstrates a lack of standardized tools for faculty to provide program feedback. Our study aims to address this gap by developing and validating a formal faculty program evaluation tool.

Methods: Following a literature review, a standardized question set regarding faculty feedback was developed and administered to key stakeholders at a multi-site neuroradiology residency program. The anonymized interview transcripts were analyzed by four members who independently extracted repeating ideas, and collectively chose common themes using a grounded theory approach. A feedback toolkit was then created and piloted.

Results: Central themes included: 1) A desire for a formalized process 2) Use of a comprehensive multi-modal toolkit 3) An optimal frequency that enables meaningful, non onerous feedback 4) The division of feedback topics into content and processes. Based on these results, a "faculty program evaluation toolkit" was developed, consisting of 1) annual face-to-face meetings with a pre-meeting questionnaire, 2) quarterly online forms and 3) an anonymous online comment box.

Conclusion: This study aims to address a gap in the current lack of validated tools for faculty. Interviews with key stakeholders have revealed central themes about the perceived most effective methods to capture faculty input, and led to the development of a multifaceted toolkit. Our next steps are to modify and validate this toolkit in an iterative process, by interviewing key stakeholders, and assessing resident satisfaction and exam scores as additional outcome measures.

PFV 8-4

69261

Exploring Cards Software to Application of Applied Evidence-Based Medicine Concepts in Undergraduate Medical Education

Mike Paget University of Calgary, **Fariba Aghajafari** University of Calgary, **Ann Subota** University of Calgary

Background/Purpose: Within Undergraduate Medical Education (UME) curriculum at the University of Calgary, the applied evidence-based medicine (AEBM) course aims to teach medical students how to critically appraise medical literature and apply evidence to practice. Areas of particular focus include diagnosis, prognosis, therapeutic interventions, systematic reviews, and guidelines. Cards is a platform for endlessly replayable patient-based cards to help medical students practice clinical problem-solving skills and prepare for the Medical Council of Canada licensing exams (https://cards.ucalgary.ca/). Students expressed interest in practice questions for AEBM delivered through Cards. We aimed to develop a diverse set of Cards to enhance understanding of applied evidence-based medicine concepts for medical students.

Summary of the Innovation: A combination of definition-based, calculation-based, and application-based questions were developed in the Cards platform. The questions focused on topics including sensitivity, specificity, positive predictive value, negative predictive value, odds ratios, absolute risk, relative risk, and number needed to treat. When applicable, the information in the clinical stems was randomized including disease names and numbers used for calculations. Detailed feedback was provided for each question.

Conclusion: Cards allows students to receive instantaneous feedback around understanding of applied evidence-based medicine concepts, practice calculations rooted in critical thinking, not pattern recognition, and high-level application questions. Medical students are increasingly turning to online recourses to supplement their learning in medical school, and the use of online platforms like Cards has skyrocketed during the SARS-CoV-2 pandemic. We hope this resource will be beneficial for students and will strengthen their knowledge in applied evidence-based medicine.

PFV 8-5

69490

Rethinking feedback for teachers: Implementation of a multisource feedback activity within a longitudinal faculty development program

Cathy Huilin Lu University of Toronto, **Viola Antao** University of Toronto, **Jana Lazor** University of Toronto, **Christopher Meaney** University of Toronto, **Danielle Dudycha** University of Toronto

Background/Purpose: Clinical preceptors provide patient care and supervise medical learners. The teaching skills for this multifaceted role require ongoing assessment and timely feedback. Multisource feedback (MSF) provides an opportunity for preceptors to receive different perspectives on their teaching behaviours/performance in the workplace. Incorporating MSF activities in faculty development (FD) programs can encourage the practice of role-modeling, self-reflection, and learning from peers or mentors.

Summary of the Innovation: We incorporated an MSF activity in a longitudinal FD program for new family medicine faculty. Over the course of three months, participants were to request feedback on a teaching encounter from a learner, peer, or mentor, and use a Self-Assessment Tool and an Observer Assessment Tool. Participants completed anonymized end-of-program questionnaires and responses were reviewed for themes. Overall, 84.2% (32/38) of participants completed questionnaires; 19 provided feedback for the MSF activity. Respondents

noted barriers to completion, including time and space constraints, and fewer opportunities during the COVID-19 pandemic. Potential facilitators included administrative support. Most participants acknowledged the value of the activity, self-reflection, and MSF. Despite this recognition, requesting feedback on teaching was considered an "additional task" that was challenging to complete, rather than an integral component of teaching.

Conclusion: This MSF activity provided insight into feedback culture from the preceptor perspective. Participants saw value in timely feedback for their teaching, yet faced competing priorities and systemic barriers. Understanding and addressing individual perceptions and institutional/systemic factors will support faculty developers and preceptors in incorporating MSF into regular teaching practice, and contribute to personal and professional development.

PFV-9: Technology

Virtual 1

PFV 9-1

69716

Keeping up with the Kardashian Index: A qualitative exploration of clinician and researcher views on impact

Victoria Tran McMaster University, **Ruth Chen** McMaster University, **Vanessa Munford** McMaster University, **Yusuf Yilmaz** McMaster University, **Teresa Chan** McMaster University

Background/Purpose: The digital age is transforming what defines research expertise and educational leadership in academia. While one's professional reputation was previously built on a scientist's publications and research income, the notion of expertise may now also be reflected in one's engagement with, and presence on, social media. The Kardashian index (K-index), proposed by British geneticist Neil Hall in 2014, is defined as a measure of potential discrepancy between a scientist's social media reputation (number of Twitter followers) and their record of publication. The purpose of this paper was to explore the opinions of active social media users in medicine regarding their knowledge and impressions of the K-index.

Methods: We used an interpretivist approach to examine the perceptions of social media experts toward K-index. Snowball sampling technique was utilized after gathering an initial list of social media experts from literature. Interviews took place online via Zoom, were transcribed, and collaboratively coded to generate overall themes on K-index.

Results: The K-index was seen as an alternative means of identifying high-value publications and a novel way of defining academic roles of quantifiability. Participants noted its value for identifying their scope of influence in the digital space, which can be leveraged for professional opportunities and recognition.

Conclusion: Use of alternative metrics like the K-Index reflect the desire for health professional scholars to disseminate information and increase scholarly engagement within the digital space. This study highlights the utility of considering social media use and knowledge dissemination as a valid and valued form of scholarship.

PFV 9-2

69648

[An evaluation of Transition to Foundations Curriculum for First Year Pediatric Residents](#)

Nina Mazze McMaster University, **Andrea Hunter** McMaster University

Background/Purpose: Foundations of Discipline is the second stage of Competency Based Medical Education for pediatric residency programs in Canada. A full-day Transition to Foundations curriculum was developed using Kern's six step guide. This curriculum included didactic and simulation components, to prepare residents for increased roles and responsibilities, particularly during pediatric night float. The purpose of this study is to evaluate which components of the curriculum were useful for residents.

Methods: The curriculum was piloted to 11 first year pediatric residents at McMaster University in September 2021 prior to Foundations of Discipline and night float rotations. Descriptive statistics of data from pre and post-curriculum surveys was used to evaluate resident perception of the curriculum.

Results: Resident response rate was 11/11 for pre- and 8/11 for post-curriculum surveys. Resident comfort with answering pages (80% pre-, 100% post) and initial assessment of patients (72.7% pre-, 100% post) improved. Comfort with acute patient presentations improved after virtual simulations, including seizure management (50% pre-, 100% post), respiratory distress (60% pre-, 87.5% post), sepsis (20% pre-, 75% post), shock (30% pre-, 50% post), assessing "watchers" on the ward (36.4% pre-, 75% post), and consulting pediatric critical care (18.2% pre-, 100% post). All respondents found the curriculum and its simulations to be helpful.

Conclusion: The Transition to Foundations curriculum is helpful for first year pediatric residents to prepare for increased roles and responsibilities in Foundations of Discipline, including night float rotations. Simulations of acute presentations improve resident knowledge and comfort prior to overnight on-call experiences.

PFV 9-3

68800

[Social media as a platform for medical and patient education in dermatology](#)

Chaosen Liu Southwest University, **Hattie Shu** University of British Columbia, **Chaocheng Liu** University of British Columbia

Background/Purpose: Social media is gaining popularity as a platform for healthcare professionals to provide educational materials on various medical conditions. The goal of the study is to analyze medical and patient education contents for common skin conditions on Twitter, Instagram, and TikTok.

Methods: 20 hashtags of medical and non-medical terms for 10 common skin conditions were searched on each social media platform and top 30 posts for each term were collected. Clearly irrelevant and non-English posts were excluded. Two authors then independently classified included posts into being social, medical education targeted medical trainees, or patient education.

Results: A total of 1650 posts from 3 different social media platforms were analyzed. The percentages of educational posts on TikTok (22.0±11.5 %), Instagram (18.3±15.8%) and Twitter (15.6±8.7%) are not significantly different (p=0.27). The hashtags with the most educational posts are #cellulitis, #acnevulgaris, and #rosacea for Twitter, Instagram, and TikTok respectively. There were few educational posts on alopecia and psoriasis on Twitter and Instagram. Twitter has the highest number of medical education posts (7.9±9.7%) while TikTok has the highest number of patient education posts (14.6±12.2%). On Twitter, search of hashtags with

medical terms yielded more medical education posts (9.7±8.6%) than that with their corresponding non-medical terms (1.1±1.8%) (p=0.01).

Conclusion: Twitter, Instagram, and TikTok can serve platforms for providing educational materials for common skin conditions. Despite their differences in means of information dissemination of audiences, the amount of the education materials is similar. Educational contents on alopecia and psoriasis on Twitter and Instagram are warranted.

PFV 9-4

69518

[Standardizing Urological Anatomy Teaching using a Clinical Enrichment Video](#)

Thejodhar Pulakunta Dalhousie University, **Jesse Ory** Dalhousie University, **Dawn MacLellan** Dalhousie University, **Landan MacDonald** Dalhousie University

Background/Purpose: Medical education has reduced the amount of time and resources allocated for anatomy education. As the amount of dedicated anatomy education time decreases, more self-directed learning is required. Cadaveric dissection and didactic teaching has been supplemented with multimedia, clinical anatomy, and imaging for over 20 years with mixed results. Specifically the use of video-based anatomy teaching has been shown to increase medical learning, if done methodically.

Methods: A 20-minute video was produced highlighting surgical anatomy using the following operative cases: perineal anatomy (artificial urinary sphincter case), inguinal and testicular anatomy (testicular torsion and hydrocelectomy), prostate anatomy (robotic radical prostatectomy), and bladder anatomy (endoscopy). The annotated video was shown to first-year medical students. Pre- and post-MCQ tests were given to the students. Once submitted, the students completed a survey.

Results: Overall, 37 first-year medical students participated in our study. Average scores were similar between each test (46 ± 18 % vs. 49 ± 17), there was no statistically significant change. Eighty percent of participants felt the video improved their knowledge of urological anatomy and agreed the video should be shown to future classes. Two thirds of participants felt the video solidified their anatomy knowledge. Eighty-three percent felt the video was stimulating and entertaining, 33% of the students felt the video increased their interest in pursuing urology as a career choice.

Conclusion: Anatomy teaching can be supplemented using surgical videos, especially in a time when in-person anatomy teaching is limited. Further study is required to determine if this teaching modality improves long-term anatomy knowledge retention.

PFV 9-5

68779

[Perceived Advantages and Challenges in Virtualized Education Amongst Psychiatric Postgraduate Learners](#)

Laura Kennedy University of Toronto, **Michael Mak** University of Toronto, **Alexandra Zourikian** University of Toronto

Background/Purpose: COVID restrictions to gathering size have dictated significant changes to the format of medical education. In-classroom teaching has been largely replaced with virtualized education. Challenges and advantages have been identified in virtualized medical education. We seek to ascertain those identified by our learners in the postgraduate program, and poll them for solutions.

Methods: University of Toronto psychiatry residents were polled anonymously via surveymonkey with the following questions: What PGY year are you? What are the TOP THREE advantages that you face as

learners when receiving virtualized teaching sessions? What are the TOP THREE challenges that you face as learners when receiving virtualized teaching sessions? What are some ways we can rectify these challenges? Responses were codified by similar descriptive categories.

Results: Most widely cited advantage of virtualized education was greater convenience. Other advantages include flexibility, increased comfort, and technological advantages. Most widely cited challenge was fatigue, followed by low engagement, isolation and technological problems. Most widely cited suggestion for improvement was reduced teaching duration. Other suggestions include educator training, allowing camera to be off, and facilitating asynchronous learning.

Conclusion: Convenience of virtual learning appeals to our resident group, perhaps due to the large geographic area covered by teaching sites. A large number of residents reported 'Zoom fatigue', possibly implying an inherent challenge present in the medium. Strategic scheduling of teaching may improve learner satisfaction. Residents value social aspect of in-class learning and appear to dislike isolation of post-COVID learning. This should be further studied as it may have implications for learner mental health.

PFV 9-6

69678

Eye tracking in visual arts and medical education: is there shared expertise?

Hassan Hazari Queen's University, **Rachel Curtis** Queen's University, **Allison Morehead** Queen's University, **Christine Law** Queen's University

Background/Purpose: As the importance of visual diagnostic skills in medical decision-making is certain, medical education has adopted eye tracking as an investigative tool. Eye movement behaviour has also been applied in the field of visual arts, particularly in the development of visual literacy. The aim of this research is to compare and contrast the use of eye tracking in developing visual expertise in two fields which both rely on keen visual skills.

Methods: A literature search was conducted for the use of eye tracking in both the medical and visual arts education domains.

Results: Thirty-seven studies were included in the final qualitative analysis. Similar eye tracking outcomes were utilized between studies in arts and medicine, including scan-path efficiency, time to first fixation, fixations in areas of interest, saccadic amplitude, and attention to salient features. By comparing the eye tracking research in both the arts and medical education, shared themes emerged: methodology in eye tracking research, theories in visual expertise, developing expertise, and teaching expertise.

Conclusion: The studies reviewed demonstrated objective similarities in eye tracking outcomes in the spheres of art and medicine. This suggests there may be shared aspects of visual literacy, which experts in both domains acquire over years of training.

PFV 9-7

69610

Assessing leadership competencies in medical students using a simulation-based learning activity

Anika Spasov University of Ottawa, **Michael Aw** University of Ottawa, **Charles Su** University of Ottawa, **Ahmed Shoeib** University of Ottawa, **Vicki LeBlanc** University of Ottawa, **Timothy J. Wood** University of Ottawa, **Emma Sypes** University of Ottawa, **Ramtin Hakimjavadi** University of Ottawa

Background/Purpose: Healthcare systems need effective leadership. Through undergraduate medical education (UGME), medical students may be exposed to leadership training early in their development as healthcare professionals. Currently, programs embedding leadership training within UGME scarcely use tangible outcomes to evaluate the effectiveness of their interventions. Practical ways to measure outcomes of leadership interventions, including changes in student behaviour, can help promote meaningful program evaluation. We sought to demonstrate the feasibility of assessing students' performances on a simulation-based learning activity using a validated scoring tool to measure key leadership competencies.

Summary of the Innovation: First-year medical students undergoing a longitudinal leadership program participated in two temporally spaced simulation-based learning activities. The activities were hosted on a virtual platform where students' performances were video recorded. Postgraduate medical residents were recruited to review video recordings in a remote, asynchronous fashion and assess student performances during each simulation. The Oxford NOTECHS II rating system, which measures pertinent leadership skills in medical training, was adopted for scoring. Student performance between the two simulation activities were used to assess changes in key skills including conflict management, negotiation, and persuasion.

Conclusion: We demonstrate the feasibility of assessing leadership skills in UGME by assessing medical students' performances on sequential simulated learning activities. All students (n=16) participated, reporting high agreement (62.5% strongly agree, 31.25% agree) that the experience enhanced their learning. Practical ways for assessing changes in student behaviour, such as the approach described here, will enable meaningful program evaluation initiatives, and ultimately promote the integration of leadership training in UGME curricula.

PFV 9-8

69674

The GPHC's mobile application: A convenient resource at medical students' fingertips

Mathieu Robichaud Université Laval, **Leila Adam** Université Laval, **William Baron** Université Laval, **Louis Miazga** Université Laval, **Antoine Bergeron** Université Laval, **Marie-Odile Caron** Université Laval, **Laura Chouinard** Université Laval, **Éliane Pelletier** Université Laval, **Marie-Laurence Côté** Université Laval, **Sophie Goulet** Université Laval, **Anne-Lorie Laplante** Université Laval, **Marie-Jeanne Morency** Université Laval, **Fannie Tremblay** Université Laval, **Kim Hoang Trinh** Université Laval

Background/Purpose: Medical students are often looking for concise study tools such as summaries and/or charts. These are particularly useful when they want to quickly access information in any situation that might arise during their medical training.

Summary of the Innovation: In 2018, the Groupe de perfectionnement des habiletés cliniques (GPHC) at Université Laval published the 2nd edition of the Petit guide des habiletés cliniques (PGHC), a reference book developed and reviewed by more than 200 students and 40 physicians,

which focuses on the physical exam findings of 215 pathologies. It sold more than 1,700 copies across francophone universities and bookstores in the province of Quebec. Many students use this book to prepare for practical exams. The purpose of the mobile application project was to grant students access to the PGHC content anywhere and at all times. In partnership with a local programmer, we therefore developed a mobile application that displays the PGHC content in an accessible way. It was made available to Apple and Android users on September 29th 2021.

Conclusion: Prior to official release and promotion, the application was purchased by 65 people in one week. Its release was eagerly awaited. Indeed, out of the 200 responders of a small survey conducted the year before among UL medical students, 121 (60,5%) stated that, on a scale of 1 to 10, their interest in a mobile application whose content would be based on the PGHC stood at 10. In the coming months, the app will be improved upon feedback.

April 24, 2022, 14:15 MST

PFV-10: Technology & learning

Virtual 1

PFV 10-1

69277

[The Implementation of a Simulation Curriculum of Hematologic Emergencies in a Hematology Residency Program](#)

Victoria David McMaster University, **Teresa Chan** McMaster University, **Daniel Brandt Vegas** McMaster University

Background/Purpose: Hematology residents face urgent clinical situations overnight, some of which they may have never encountered previously. The McMaster hematology residency program provides a two-hour didactic lecture at the start PGY-4 to review approaches to hematologic emergencies. These lectures do not assess a trainee's approach to the clinical situation, nor does it allow to coach the trainee on their approach. A simulation curriculum of hematologic emergencies would address these gaps.

Summary of the Innovation: McMaster Hematology residents were surveyed in August 2020 to assess their perception of the need for a simulation curriculum of hematologic emergencies. The survey outcome variables included previous experience in simulation, interest in a simulation curriculum, and curriculum objectives. The survey was distributed to nine McMaster Hematology residents. Eight trainees responded (89%). The majority of residents had experience with simulation in medical school (87.5%,n=7) and residency (100%,n=8). The majority of trainees (87.5%,n=7) felt the delivery of a simulation curriculum of hematologic emergencies at the start of PGY-4 would have better prepared them to handle these clinical situations. The McMaster Hematology residency program ran two simulation sessions in April 2021 (case 1: acute leukemia, case 2: CAR-T cell therapy). Participants were surveyed to evaluate the session. Residents found simulation valuable in improving their clinical skills. They felt simulation was complimentary to didactic sessions and should not replace didactic sessions.

Conclusion: Trainees found simulation valuable and that it is complimentary to didactic sessions. A simulation curriculum in hematologic emergencies could be used as part of the transition to discipline stage of Competence By Design.

PFV 10-2

69554

[The Power of Pandemic Pondering: Creating a virtual elective for a remote based learner](#)

Rhea Galbraith Northern Ontario School of Medicine, **Michelle Gibson** Queen's University

Background/Purpose: Training of medical learners has traditionally occurred in person. During the pandemic, many core rotations and electives were cancelled. We report on the experiences of a virtual-based learner and supervisor, separated by 500km, navigating the logistics of a required elective delivered remotely. This also acted as a pilot for future remote electives.

Summary of the Innovation: A longitudinal clinic-based elective in geriatrics was arranged one day a week over 12 weeks for a post-licensure fellow. Referrals were screened by the attending physician for appropriateness for virtual intake interviews (telephone or video) with the resident. Patient consent was obtained and intake assessments were conducted by the resident, and reviewed with the attending physician. Patients were subsequently booked to be seen in person for physical exam and cognitive testing by the attending physician with the fellow participating over secure video platform. Follow-ups were arranged either in person or virtually, as appropriate.

Conclusion: A virtual elective format is an innovative teaching tool to include medical learners in clinical experiences. Challenges included initial technology set up and familiarization with city geography and local resource variations. The resident learner was able to meet rotational requirements, benefitted from the teaching received from a faculty in another institution, and a clinic wait list was reduced. The success of this pilot project highlights the opportunity to offer further virtual elective experiences to learners, to supplement in-person learning experiences in programs, particularly for those training in northern or remote communities where access to specialized rotations is limited.

PFV 10-3

69258

[Residents' Perceptions of a Virtual Livestream Cadaveric Teaching Series for Musculoskeletal Anatomy Education](#)

Lalith Satkunam University of Alberta, **Jaime Yu** University of Alberta, **Andy Le** University of Alberta

Background/Purpose: The teaching and learning of musculoskeletal anatomy has consistently been considered difficult across many contexts for various reasons. Physiatry residents are training to be neuromusculoskeletal experts and require a thorough understanding of musculoskeletal anatomy. Traditional teaching methods have focused on in-person cadaveric sessions, which have been inaccessible during the COVID-19 pandemic; therefore, new teaching methods must be developed to address this gap in education. This project involved the implementation of virtual livestream musculoskeletal anatomy teaching methodology with cadaveric prosections and evaluated the efficacy of this modality compared to traditional in-person cadaveric teaching.

Summary of the Innovation: An anatomy curriculum for 3 musculoskeletal topics was developed and delivered via livestream to 12 University of Alberta Physiatry residents. Upon completion of the virtual curriculum, residents completed an anonymous survey assessing perceptions of this new virtual livestream cadaveric teaching approach compared to prior experiences with traditional in-person anatomy teaching methods.

Conclusion: A total of 92% of residents responded to the survey, with 9% rating the virtual livestream sessions as equivalent and 73% as better than

traditional in-person teaching. Common reasons for these ratings included better visualization of cadaveric anatomy and easy discussion amongst the group. T-test analysis comparing livestream and in-person teaching demonstrated the virtual method was equivalent or better across several domains. This study adds merit to the use of virtual livestream teaching as a viable method for teaching the important subject of musculoskeletal anatomy to learners in healthcare professions and educators should consider how to best integrate this approach into future anatomy curricula.

PFV 10-4

69335

Virtual Breakout Rooms: A Novel Modality to Facilitate Online Anatomy Laboratory Learning in Small Groups

Alexa Hryniuk University of Manitoba, **Kapilan Panchendrabose** University of Manitoba

Background/Purpose: In-person small group learning is integral for anatomical instruction for health professional students, however, the Covid-19 pandemic caused a shift to online learning. Therefore, the purpose of this study was to evaluate the usefulness of small group virtual breakout room sessions as a replacement for in-person anatomy laboratory learning.

Methods: Pharmacy and respiratory therapy (RT) students (n=35) attending the University of Manitoba who participated in an online human anatomy course completed a questionnaire containing Likert scale and open-ended questions regarding anatomy learning via virtual small group breakout rooms.

Results: Online anatomical studies had no academic advantage or disadvantage compared to in-person instruction. When surveyed about the helpfulness of breakout room sessions in learning anatomy, pharmacy and RT students' mean score were 2.95±0.16 and 3.33±0.19 respectively. Students commented about the advantage of discussing anatomical concepts with their peers in a small group format. The majority of students reflected that they were active participants during these breakout sessions (mean score of 4.07±0.16). Students were randomly assigned to their small groups each lab. When asked about the preference of staying with the same student group most indicated that they preferred to be with the same group each lab (3.40±0.20). Additionally, many comments indicated that having the same group for each anatomy lab would have enhanced their learning experience.

Conclusion: Health professional students found virtual small group learning an acceptable and appropriate substitute to traditional small group learning and suggests that continuity of group members would enhance their learning in this modality.

PFV 10-5

69431

Preparing Medical Students for Artificial Intelligence: A Survey of Educational Needs and Impact of a Lecture on Perceptions

Danielle Walker McMaster University, **Stefanie Lee** McMaster University, **Hussam Kaka** McMaster University, **Catherine Campbell** McMaster University, **Namita Sharma** McMaster University

Background/Purpose: As artificial intelligence (AI) research and applications grow exponentially, updates to the undergraduate medical curriculum are necessary to prepare learners to understand and adapt to AI in medicine. However, few formal curricular opportunities and competency frameworks currently exist. To guide future implementation efforts, we surveyed medical students regarding their educational needs and the impact of a lecture on perceptions of AI.

Methods: An "Introduction to AI" lecture was provided to all first-year students at McMaster University in August 2021. Pre and post lecture surveys were administered to assess students' perceptions and attitudes towards AI in medicine and medical education. The Wilcoxon signed-rank test was used to evaluate for changes on a 5-point Likert scale.

Results: 112/204 (55%) of students responded to both surveys. 91% felt that AI training should be delivered during medical school. Following the lecture, students reported increases in their interest in AI, desire to seek out further AI learning, comfort with their current knowledge about AI, understanding of AI concepts, and opinion that benefits of AI application in medicine outweigh risks ($p<0.01$). Students reported reduced discomfort with the growing role of AI in medicine and less concern for the potential impact of AI on physician jobs ($p<0.01$).

Conclusion: The vast majority of surveyed medical students feel that AI training should be delivered as part of the undergraduate curriculum. Improved perceptions and decreased apprehension regarding AI following a single formal lecture highlight the importance of a formalized AI curriculum as part of undergraduate medical education.

PFV 10-6

69485

Evaluating the impact of a virtual educational intervention on medical students' knowledge and attitudes towards patients with intellectual and developmental disabilities

Ivona Berger University of Toronto, **Shannon Weissman** University of Toronto, **Hira Raheel** University of Toronto, **Amrita Bagga** University of Toronto, **Roxanne Wright** University of Toronto, **Alvin Loh** Surrey Place, **Janet Vogt** Surrey Place, **Barry Isaacs** Surrey Place, **Carolyn Lee-Jones** Surrey Place, **Fok-Han Leung** University of Toronto

Background/Purpose: People with intellectual and developmental disabilities (IDD) face significant health disparities. Healthcare barriers include physicians' lack of experience, knowledge/skills, and their negative attitudes towards IDD. Thus, there is a need for greater emphasis on providing quality care to people with IDD in medical training.

Methods: First-year medical students at the University of Toronto completed a pre-post survey (which included a knowledge assessment and the Community Living Attitudes Scale-Short Form (CLAS)) pertaining to the IDD curriculum. The curriculum consisted of virtual tours of developmental sites, panel discussions, and tutorial presentations. Ninety-five students completed the pre-survey, 58 completed the post-survey, and paired data, available for 33 students, was analyzed using descriptive analysis and paired 2-tailed t-tests.

Results: Following the curriculum, students' confidence communicating with a person with IDD increased significantly (pre-mean=5.7/10, SD=1.9; post-mean=6.3/10, SD=1.7; $p<0.05$) as did their feeling of competence taking a history from the person (pre-mean=4.2/10, SD=1.9; post-mean=5.5, SD=1.7; $p<0.0001$). Their comfort interacting with people with IDD showed no statistically significant change. The CLAS sheltering subscale showed a significant change (pre-mean=2.8/6, SD=0.7; post-mean=3.2/6, SD=0.7; $p<0.005$), in favour of increased sheltering of people with IDD.

Conclusion: Students reported more confidence communicating with people with IDD and feeling more competent collecting their medical history. The curriculum focus on organizations and group homes may impact attitudes towards sheltering people with IDD. The curriculum could address this bias by implementing virtual, community-based IDD experiences to improve provision of care. Next steps include a qualitative study to further assess students' experiences with this curriculum.

PF 10V-7

69556

[The Anesthesia App - A Mobile App for Anesthesia Education](#)

Ashish Mathews McMaster University, **April Liu** McMaster University, **Ekta Khemani** McMaster University

Background/Purpose: Smartphones are an easy method of accessing information in clinical environments, especially when encountering novel information and scenarios. Medical students often face a steep learning curve, with a two-week rotation in anesthesia. Therefore we aimed to create an app to aid medical learners in some of the core aspects of their anesthesia rotations.

Summary of the Innovation: The Anesthesia application was developed with student feedback to assist students in a few core aspects of anesthesia: 1) drug dosages and choice, 2) pre-operative preparation and 3) intraoperative emergency management. The app features a list of the most used anesthesia-related medications and suggests dosage ranges for the learner based on both weight, height and age. It also features a pre-operative checklist which reminds students of the most important questions to ask before the surgery. Additionally, a list of common intraoperative emergencies and their management, adapted from the Stanford Anesthesia Emergency Manual, allows students to prepare for and react quickly to emergencies. Finally, links to report adverse events to specific databases were added to help further research and awareness for future events.

Conclusion: The app is currently being developed and piloted by select medical students at the Michael G. DeGroote School of Medicine during their anesthesia rotations. We plan to publish this app and to introduce it as a resource for the clinical clerks across Canada in the coming years. We hope to collect user data in which features are more useful for learners in order to further develop these specific aspects of the app

PFV 10-8

69577

[Evaluation of the Virtual Introductory Student Course in Ophthalmology: an online structured educational program for medical students](#)

Jonathan Micieli University of Toronto, **Clara Long** Dalhousie University, **Amirthan Sothivannan** McMaster University, **Anne Nguyen** McGill, **Michael Nguyen** University of Toronto, **Amandeep Rai** University of Toronto, **Sherif El-Defrawy** University of Toronto, **Emre Islam** University of Saskatchewan

Background/Purpose: Medical students have reported gaps in basic ocular disease knowledge and management due to limited teaching time. The COVID-19 pandemic has amplified existing curriculum deficits. Studies report that virtual education can be successfully implemented to teach ophthalmology, however, they have not been assessed or widely adopted in Canada.

Methods: Canadian Medical students were invited to participate in the Virtual Student Course in Ophthalmology (VISCO), consisting of nine virtual workshops on key ophthalmological concepts across six weeks and a structured reading list. Outcomes included participant-rated levels of confidence with core ophthalmology topics and pre- and post-workshop quizzes.

Results: 353 participants completed the pre-course survey, and 136 (38.5%) completed the post-course survey. Participants' overall confidence rating in ophthalmology topics increased by 1.05 [95% CI: 0.90, 1.20] (3.03 to 4.08, p<0.001), with significant increases for every individual topic (p<0.001). Mean overall quiz scores improved by 35% [95% CI: 31%, 39%] (43% pre-workshop vs 78% post-workshop, p<0.001), with significant improvement in quiz scores seen after each workshop

(p<0.001). Qualitative feedback identified interactivity, course content, and teaching quality as strengths of VISCO; and suggested that future courses include more learning resources and flexible workshop timing.

Conclusion: VISCO is an effective method of teaching ophthalmology to medical students. Virtual learning may act to supplement in-person medical school curricula during the COVID-19 pandemic and thereafter.

PFV-11: EDI

Virtual 1

PFV 11-1

68789

["I wouldn't dream of reporting you". The culture of silence in medical education.](#)

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

Background/Purpose: Medical education training is structured into a hierarchical system, where physicians are teachers and role models to students. Teaching occurs in the formal, informal (unplanned) and hidden curriculum (not acknowledged). Medical students learning in public clinics and wards can be exposed to physicians being racist without facing any consequences. The lack of acknowledgement of this unprofessional behaviour can influence medical students to accept this behaviour as normal and tolerated in medical education learning environments.

Methods: This research is based on findings from a larger study examining professional identity 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 collected student accounts of their formal and informal learning experiences, including their experiences on clinical wards.

Results: Medical students reported witnessing physicians making racist comments about Indigenous patients and being prejudiced against other marginalized groups. This was challenging for students, who then had to consider whether to report the physician behaviour. The students were aware that faculty physicians were potential sources of reference letters for future residency positions. Thus, they chose not to challenge the physicians' racist behaviours.

Conclusion: The students observed unprofessional and racist behaviours, part of a hidden curriculum in medical education learning environments. Medical education in Canada should focus on critical cultural approaches, like cultural safety and cultural humility. Safe reporting mechanisms should be established to allow students to identify and report any unprofessional behaviour without fear of retaliation.

PFV 11-2

69501

[Enhancing Cultural and Structural Competencies: Implementing and Evaluating an Innovative Curriculum in a Psychiatric Residency Program](#)

Alison Darnley University of Calgary, **Harry Zhou** University of Calgary, **Rachel Grimminck** University of Calgary

Background/Purpose: People of colour in Canada experience substantial health disparities. Enhancing the cultural and structural competencies of health care providers is one of several proposed strategies to address health disparities. Although guidelines on cultural competency training for psychiatric residents has been published by the Canadian Psychiatric Association, there is a dearth of literature describing the implementation of educational interventions including evaluations of the effectiveness of such interventions. At the University of Calgary, major gaps in addressing

cultural and structural competencies have been identified in the psychiatric curriculum.

Summary of the Innovation: In the context of global Black Lives Matter movements and the COVID-19 pandemic, a 3.5-hour curriculum was co-created by a senior psychiatry resident of colour and a staff psychiatrist. The curriculum was delivered in-person to Year 2 to 5 psychiatry residents divided into two cohorts. The aim was to improve residents' awareness, attitude, knowledge, and skills pertaining to cultural and structural competencies. The content included cultural identity and concepts of distress, racism and microaggressions, structural vulnerability and intersectionality. In line with social constructivism learning theory, small group discussions and reflective activities were prioritized over didactic teaching. To promote deeper and richer discussion, psychological safety as well as openness and curiosity among participants and facilitators were emphasized.

Conclusion: The curriculum was evaluated with pre and post surveys, and focus groups. The curriculum improved participants' personal and professional awareness, facilitated positive attitudes toward self and others, and increased motivation for self-directed learning. An unexpected outcome was enhanced cohesion among the resident cohort, in turn promoting resident wellness.

PF 11V-3

69322

[Presentation Topic Choice at Dalhousie Psychiatry Grand Rounds: Does it vary by gender?]

Kim Good Dalhousie University, **Mandy Esliger** Dalhousie University, **Owen Connolly** Dalhousie University, **Lara Hazelton** Dalhousie University, **Alicia Reil** Dalhousie University, **Courtney Handford** Dalhousie University

Background/Purpose: Previous studies identified an underrepresentation of women in academic medicine and specifically, as presenters at grand rounds. While the reasons for this disparity are unclear, it is possible that topics presented by female presenters are deemed less desirable. Using evaluation data from Dalhousie Department of Psychiatry grand rounds, this study seeks to determine whether certain topics are more highly rated by attendees, and if there is a difference in topics presented by women.

Methods: ata from 259 grand rounds presentations from 2012-2021 were analyzed. Based on title, presentation topics were coded by multiple reviewers and collapsed into 5 categories: clinical, basic science, social science, systems science, and professional development. A chi-squared analysis and several 2-way ANOVAs were performed to compare how topics were rated across evaluation domains and to determine the relationship between gender and topic.

Results: The chi-squared analysis run across the topic categories and gender did not yield significant results ($\chi2(4)=2.37$, p=ns). The results of the nine separate ANOVAs showed no main effects for gender or category, nor any gender by category interaction. However, there were significant main effects for category, with basic and clinical science rated most highly and social and system science most poorly.

Conclusion: Topic choice and evaluation across domains do not appear to differ based on gender of the presenter at medical grand rounds in psychiatry. However, basic and clinical science topics appear to be perceived more favourably by attendees.

PFV 11-4

69218

[Indigenous Health Education for Health Systems Leaders: Learnings from the implementation of new faculty development programming]

Dina Moinul University of Calgary, **Rachel Crooks** University of Calgary, **Michelle Lu** University of Calgary, **Pamela Roach** University of Calgary, **David Keegan** University of Calgary, **Amanda Roze des Ordons** University of Calgary, **Kenna Kelly-Turner** University of Calgary

Background/Purpose: Structural competency is needed in medical educational leadership roles to increase intercultural safety throughout academic institutions. To support increased equity and anti-racism education across the Cumming School of Medicine, the implementation and delivery of a new leadership program (PLUS4i) was developed. The program aims to develop capacity for leaders to understand how to improve Indigenous reconciliation in their areas of work. The purpose of this qualitative study was to understand barriers, facilitators, and key recommendations for transformative leadership education.

Methods: We recruited course attendees (n=17) from the first two cohorts of PLUS4i who had agreed to be contacted for future research via email and conducted semi-structured qualitative interviews. Participants were asked about their motivations for attending the course, skills developed, course content, and remaining gaps in their own knowledge. Using inductive thematic content analysis, two research assistants independently open-coded transcripts via NVivo and grouped codes into themes, facilitated by ongoing discussion with the project team.

Results: The major themes that emerged were participants' motivations for attending the course, including a recognition to change practice and fill knowledge gaps; a preference for course delivery over several weeks to allow time to process information and engage in reflective practice; and a need for the course to be action-oriented components. Participants expressed an interest in ongoing discussion, accountability, and support after course completion.

Conclusion: This research indicates that education targeting leadership in enhanced with the inclusion of three key components: i) knowledge acquisition; ii) pragmatic action-oriented learning; and iii) an ongoing peer support community.

PFV 11-5

69330

[Recognizing and Managing Implicit Bias in Dental Education]

Bertha Garcia Western University, **Caitlin Loo** Western University, **Javeed Sukhera** Hartford Hospital

Background/Purpose: Implicit bias can negatively impact the provision of healthcare and the education of healthcare professionals. Curricula on bias recognition and management have been proposed as a solution to address disparities and improve equity but have had mixed results. Research suggests that interventions to address bias should be contextually specific; however, within dentistry, little is known about how bias may influence dental care and education. Our study explored perspectives on implicit bias and how it can be addressed in the context of dentistry and dental education.

Methods: The researchers sampled dental students and faculty at Western University in Ontario, Canada, after they completed an implicit association test and received their results. Using constructivist ground theory, semi-structured interviews were conducted regarding participants' experience taking the IAT and their perspectives on implicit bias in dentistry and dental education. Transcripts were iteratively coded and analyzed for results.

Results: Similar to previous research, participants described a continuum from denial to acceptance regarding their biases. They acknowledged the unique role that bias can play in dental care and education, noting that while female representation and ethnic diversity have increased among dental students over recent years, implicit bias still influences perceptions and interactions within dentistry, creating disparities with implications for health equity.

Conclusion: These findings highlight issues surrounding implicit bias in dentistry and call for the development of educational activities and integration of curricula on implicit bias in dental education. Attention to how bias manifests unique to a dental context will help educators to design appropriate curricula for the future.

PFV 11-6

69453

[Challenging Assumptions About Career Options in Healthcare - Implementation of a Roundtable Event Targeting High School Students in Low-Income Communities](#)

Praveen Srirathan McMaster University, **Anahita Lamei** McMaster University, **Michelle Schneeweiss** McMaster University, **Connie Li** McMaster University, **Francis Lao** McMaster University, **Felipe Fajardo** McMaster University

Background/Purpose: The high school to healthcare profession pipeline is limited in its ability to provide guidance and mentorship to students potentially interested in healthcare, especially in low-income communities. Chronic underfunding of career exploration initiatives and guidance counsellors provides an opportunity for systematic re-invigoration in these settings. McMaster medical students, in collaboration with Pathways to Education Hamilton at Compass Community Health, planned a roundtable event to assist students from low-income communities in exploring career options within healthcare.

Summary of the Innovation: The roundtable consisted of a free and virtual panel-style interactive discussion, focusing on educational requirements and daily responsibilities of a practicing professional. Panelists represented 7 fields: speech-language pathology (SLP), occupational therapy (OT), medicine (MD), physician assistant (PA), nursing (RN), physiotherapy (PT), and clinician-scientist (MD/PhD). A 14-item online survey was disseminated before and after the event to assess student self-reported understanding of the responsibilities of allied health professionals presented in the panel. In total, 7 students attended the event. There was a significant ($p<0.05$) increase in self-reported understanding of the responsibilities of SLPs, OTs, PAs, PTs, and PhDs. There was a slight decrease in interest in becoming an MD post-event, although this was not statistically significant.

Conclusion: We implemented a free and accessible program to assist students from low income backgrounds in learning about the interdisciplinary nature of healthcare and career options available. Diversifying the healthcare field is crucial to re-invigorate our health institutions and help challenge biases and prejudice that continue to have an impact at the patient level.

PFV 11-7

69225

[Culture as a Continuum: How to Evoke Cultural Awareness in Health Sciences Education](#)

Mohammad Zubairi McMaster University, **Jihyun Sung** McMaster University, **Sanya Mehndiratta** McMaster University, **Michelle Yao**

Background/Purpose: The general movement of services, ideas, and people across borders has altered the demographics of individuals accessing healthcare. In response to this matter, academic institutions have begun introducing cultural education in order to equip students with the tools they need to effectively address encounters in which a patient's cultural background differs from their own. Overall, this study aims to evaluate how a literature-informed cultural education casebook can facilitate critical reflection among students in the health profession.

Methods: To date, eight students from 5 different health professions have been recruited to assess and apply the training detailed in the casebook to evaluate its role in promoting cultural awareness and developing a critical perspective on equity, diversity, and inclusion (EDI) considerations. To conduct this evaluation, situational analysis was utilized. Our data set includes qualitative observations made by co-investigators during a 2-hour training session, students' responses to interviews conducted 2-4 weeks after the training session, and students' responses to a survey that will be disseminated 3 months following the training session.

Results: Data from our training sessions and interviews found that many students identified a gap in cultural education within their programs and emphasized a need for continuous training throughout one's career as a healthcare professional. The participants also described the casebook as an easily accessible tool to introduce issues regarding culture in healthcare and ways in which to approach the issue.

Conclusion: The casebook that we have developed holds the promise of facilitating cultural education for trainees in the health professions.

PFV-12: Wellness

Virtual 1

PF 12V-1

69470

[Forum on Failure - Celebrating Setbacks](#)

Hannah Koury University of Calgary, **Natalya Patrick** University of Calgary, **Johanna Holm** University of Calgary

Background/Purpose: Student Wellness representatives had several classmates step forward with feelings of disappointment and isolation early in their schooling. A peer had attended a conference on physician health, and a common theme was acknowledging the changes that must be made in medical culture if we are to support physician wellness and wellbeing long term. Specifically, an actionable take-home message was to try to change the glory stories we tell. We felt this learning and the subsequent event was ideally timed for our student body, as all three classes were about to embark on stressful periods in their training.

Summary of the Innovation: The "Forum on Failure" was a panel-style event. Residents and faculty from various fields shared their experiences with failure and setbacks in their training (both in UME and PGME). Topics included: LOA's, failing exams, failing relationships, going unmatched, etc. The presenters' stories created a humanistic atmosphere and an insightful Q&A period with the audience.

Conclusion: Normalized conversations surrounding setback and failure in medicine. Emphasized that setbacks do not define who we are as a person. Demonstrated with tangible examples that it is ok to talk about setbacks, ask for help, and that it's a common experience for medical

trainees as well as those well established in their career. Allowed students an opportunity to see the vulnerable and human side of preceptors and residents who they look up to, and simultaneously creating a safe environment in which preceptors and residents can share pieces of their journey with students.

PFV 12-2

69037

Enhancing Clinician Well-being Through Self-Compassion Training

Sarah Hunt Northern Ontario School of Medicine, **Jenna Simpson** Northern Ontario School of Medicine, **Bryan MacLeod** Northern Ontario School of Medicine

Background/Purpose: Clinical medicine is associated with increased risks of depression, anxiety, burnout, and suicide, demonstrating a need to provide physicians with opportunities to enhance their well-being. Self-compassion training has been shown to increase well-being among healthcare workers. This study sought to determine if self-compassion training through continuing medical education (CME) is an effective strategy to enhance the well-being of clinicians in Northern Ontario.

Methods: Self-Compassion for Healthcare Communities (SCHC), an evidence-based self-compassion training program, was delivered to clinical faculty at the Northern Ontario School of Medicine (NOSM) on a voluntary basis. Pre- and post-course anonymous questionnaires administered to participants two weeks prior (n=49) and two weeks following (n=27) the course measured well-being using validated tools including the Self-Compassion Scale, Depression Anxiety Stress Scale, and Professional Quality of Life Scale. Focus groups (n=12) were conducted two weeks after completion of the course, and concentrated on respondents' feelings and experiences.

Results: Statistical analyses using T-tests revealed that participation in the SCHC course increased self-compassion (p<0.05), and decreased feelings of depression (p<0.05), stress (p<0.01), secondary traumatic stress (p<0.01), and burnout (p<0.0001). Qualitative analysis emphasized that the SCHC course helped manage difficult emotions, and offered emotional support.

Conclusion: Participation in the SCHC course demonstrated marked benefit, as learning the skill of self-compassion led to an improvement in well-being. SCHC also provided faculty with enhanced connection and support. Self-compassion training should be further investigated as a CME strategy to enhance the well-being of clinicians across Canada.

PFV 12-3

69640

The State of Wellness Education In Medical Schools Across North America: A Scoping Review.

Noam Raiter McMaster University, **Kiana Yau** McGill, **Alisha Sharma** McMaster University, **Victor Do** University of Toronto

Background/Purpose: Medical students experience increased rates of burnout, depression, and suicide compared to the general population. Yet, it is unclear to what extent North American medical schools have adopted formal wellness curricula. Further, the content and delivery methods vary widely. We sought to establish prevailing themes of existing wellness curriculum across medical schools and aimed to identify opportunities for further-curricular development.

Methods: We conducted a scoping review of the literature searching for wellness education programs implemented for undergraduate medical students across North America. Four comprehensive databases and grey literature were searched. Only published original research was included in

further analysis. All papers were screened by two independent screeners with disagreements resolved by a third coder.

Results: The initial search identified 3996 articles of which 30 met our inclusion criteria and were included for further analysis. Of these studies, three are from Canadian institutions. The most common type of intervention across studies was mindfulness and meditation practices which were included in 18 studies. Importantly, 27 of the studies found their interventions were significantly effective at improving reported mental well-being in some scope.

Conclusion: Our review identified a low number of published mental wellness curricular initiatives and many of those identified are of poorer methodological rigor. The themes of existing literature suggest that the adoption of a wellness curriculum has the potential to improve mental health outcomes for medical students. As such, these findings can be used to assist in the development of a validated mental wellness curricular framework to be used across institutions.

PFV 12-4

69691

Two Years of Wellbeing and Mental Health Amongst Medical Students in Calgary

Chris Wilkes University of Calgary, **Mike Paget** University of Calgary, **Andrew Bulloch** University of Calgary, **Frank MacMaster** University of Calgary, **Hannah Koury** University of Calgary, **johanna Holm** University of Calgary, **Nancy Brager** University of Calgary, **Natalya Patrick** University of Calgary

Background/Purpose: There is evidence that medical students have face mental health challenges during their programs. Canadian studies show significant levels of burnout before these students even become doctors.

Methods: Over two years we surveyed medical students at the Cumming School of Medicine. The survey was online, and included demographic information, a mental health history, CAGE, general health questions, and the Oldenburg Burnout Inventory. Round two of this survey was during the massive disruption of the program as a result of COVID.

Results: 69 students out of 450 responded in round one, 101 out of 460 responded in round two. We had representation across all three years of the program. Using the Bonferoni test for multiple comparisons no significant difference between the two surveys was detected. In both rounds over 74% of the students made case criteria for GHQ 12, a general health questionnaire to identify minor psychiatric disorders. Financially, our students at University of Calgary have higher than average debt and this was a significant stressor for students in the last phase of the program in the first survey (60% of respondents in clerkship versus 26% in pre-clerkship).

Conclusion: At the Cumming School of Medicine, significant investment has been underway improving student access to mental health supports in the face of high levels of stress. Further use of this instrument (survey) will be part of the process of continuous monitoring.

PFV 12-5

69715

Navigating health and wellness initiatives in an uncertain hybrid (virtual/in-person) climate

Shinthujah Arulanantham University of Toronto

Background/Purpose: The SHINE wellness program at the University of Toronto's Faculty of Medicine works collaboratively with students, and faculty to address the unique challenges faced by medical students. Recent changes to COVID public health guidelines, have driven this

student-led team to find innovative ways to address student needs in an uncertain hybrid (virtual and in-person) climate. Despite increased opportunities for in-person student encounters, several students have expressed the need for social opportunities to meet their classmates and form networks and connections with one another.

Summary of the Innovation: In response to this emergent need, SHINE has incorporated personalized events into their virtual programming to provide equitable opportunities for students to meet one another. Following a speaker event, students had the option of joining break-out rooms to discuss take-aways in a smaller setting (3-4 students) with a moderator to spark conversations. A 'speed-dating' event was hosted where students had an opportunity to meet groups of students (max 2-4 students) in 15-minute blocks. We even hosted a pet therapy session where students brought their furry friends to meet each other and form connections.

Conclusion: Our rapid reprogramming of virtual events with a personalized lens has provided several students a comfortable, safe platform to meet their peers, de-stress, and form important connections to help navigate the challenges of medical education. This process has taught us the importance of flexibility and unconventional thinking in a constantly changing environment. We hope to continue to challenge our methods of program delivery to support medical student wellness during this hybrid academic year.

PF 12V-6

69051

Improving Resident Wellness Through a Department Level Intervention: Effect of a Change in Call Structure on Dermatology Resident Burnout, Education and Patient Care

Janeve Desy University of Calgary, **Emma Heck** University of Calgary, **Jori Hardin** University of Calgary

Background/Purpose: More than half of Canadian residents report symptoms of burnout. Time on call can be particularly high-stress due to hours worked and the inflexible schedule. Restructuring call to reduce non-call related (NCR) working hours and improve schedule autonomy may reduce burnout.

Methods: This pre-post study was performed July 1- December 31, 2020 and involved dermatology residents at the University of Calgary who participated in call before and after a departmental policy change removing residents from regularly scheduled NCR clinics during call weeks. The Copenhagen Burnout Inventory (CBI) and other survey questions were used to determine average resident burnout levels, as well as resident perception of learning on call and quality of patient care, before and after the policy change.

Results: Seven out of 8 senior dermatology residents completed the surveys. The average resident CBI score decreased significantly in all three categories of burnout after the change in call policy (personal burnout 51.8 pre vs 35.1 post, P<.005; work-related burnout 56.1 pre vs 42.4 post, P<.01; patient related burnout 40.5 pre vs 31.0 post, P<.001). Most residents felt the intervention improved their learning and the quality of patient care.

Conclusion: Our study demonstrates that a change in call structure, intended to reduce NCR work hours and improve resident autonomy over their call schedule, led to a decrease in measures of burnout in senior dermatology residents. Initiatives that restructure work hours, thus giving residents more control and flexibility with their scheduling, may be one way to reduce burnout amongst medical trainees.

PFV 12-7

69697

Sleep and Fatigue in Residency: Identifying Needs for a Pilot Fatigue Risk Management Plan

Dennis Newhook University of Ottawa, **Tobey Audcent** University of Ottawa, **Vivian Ng** University of Ottawa, **Vivian Ng** University of Ottawa, **Amy Robinson** University of Ottawa, **Nicole Sheridan** University of Ottawa, **Stephanie Sutherland** University of Ottawa, **Sandy Tse** University of Ottawa, **Drew Dawson**

Background/Purpose: Given patient care is provided 24/7, fatigue is an occupational risk in medical education to both patient safety and resident health. To mitigate these risks, the uOttawa Pediatrics Program was tasked with creating a pilot Fatigue Risk Management Plan, starting with a baseline fatigue scan of current trainees.

Methods: Twenty-six pediatric residents completed demographic surveys and 14-day diaries to assess sleep quantities/patterns and pre- and post-shift fatigue levels. Focus groups further explored fatigue experiences during training. Quantitative data identified shifts with high-risk of fatigue-related errors, with previous research suggesting cut-offs of <5h of sleep in the previous 24h or <12h in 48h. Qualitative thematic analysis was performed to draw key themes.

Results: Sleep diaries captured 111 work shifts, with longest shifts being 26h on-call. 11.9% of shifts residents had <12h of sleep in the preceding 48h, and 2% of shifts residents had <5h in the past 24h. 12.9% of pre-shift levels and 30.9% of post-shift levels were in the severe (score 8-9) range. Thematic analysis of focus groups identified key themes: (1) Organizational Fatigue Prevention/Management Strategies, (2) Organizational culture factors influencing perceptions/attitudes towards fatigue, (3) Recognizing Fatigue in Self, and (4) Barriers to Sleep/Contributing Factors to Fatigue at Work.

Conclusion: This study provides a baseline of current residents' fatigue levels, suggesting a proportion of shifts were high-risk for fatigue-related errors based on prior sleep-wake data. Key themes identified potential topics for educational interventions as well as targets for organizational improvements with regards to fatigue risk management.

April 24, 2022, 14:30 MST

PFV-13: Admissions

Virtual 1

PFV 13-1

69374

La diversité des étudiants en médecine : Un regard descriptif sur une grande faculté de médecine canadienne

Manon Denis-LeBlanc University of Ottawa, **Kathryne DesAutels** University of British Columbia, **Julia Lauzon** University of Ottawa, **Selya Amrani** Queen's University, **Nicholas Brunet-Filion** University of Ottawa, **Étienne Pascal Éric Rhéaume** University of Ottawa, **Salomon Fotsing** University of Ottawa

Background/Purpose: Dans les facultés de médecine, la diversification de la population étudiante améliore la préparation de ceux-ci à soigner les communautés mal desservies et augmente la satisfaction des patients et l'accès aux soins. Cette étude visait à décrire le profil global des étudiants admis en médecine à l'université d'Ottawa et à le comparer aux données des autres facultés ainsi qu'a de la population générale canadienne

Methods: Un questionnaire administré en ligne a permis de recueillir les antécédents démographiques, éducatifs et socio-économiques des cohortes MD2020 à MD2023. Les données ont été analysées à l'aide du KaleidaGraph, Synergy Software, Version 3.6.

Results: L'âge moyen des répondants était de 22,19 ans (ET = 2,04). La majorité des étudiants (82%) avait complété un baccalauréat avant l'admission. Un nombre élevé (79,7 %) avaient une moyenne pondérée cumulative de GPA (entre 3,9 et 4,0) semblable à celle rapportée par la majorité des facultés de médecine canadienne. Près d'un tiers (36%) de répondants s'identifiaient comme minorité visible (versus 22,3% dans la population canadienne). Les étudiants noirs et autochtones étaient sous-représentés (2,9 % et 2,5 % versus 3,5% et 4,9% dans la population canadienne). Plus de la moitié des étudiants (55,2 %) avait un revenu familial supérieur à 100 000 $ (versus 32,4% dans la population canadienne).

Conclusion: Il existe des différences notables entre les étudiants en médecine de l'Université d'Ottawa et la population canadienne. Accroître la transparence de la diversité des étudiants en médecine est souhaitable et permettrait aux futurs étudiants de faire des choix éclairés.

PFV 13-2

69492

Explicit and Implicit Anti-Indigenous Bias among Medical School Applicants

Amanda Carbert University of Calgary, **Pamela Roach** University of Calgary, **Rabiya Jalil** University of Calgary, **Santanna Hernandez** University of Calgary, **Remo Panaccione** University of Calgary, **Shannon M. Ruzycki** University of Calgary

Background/Purpose: Racism, colonialism, and oppression are prevalent in the Canadian healthcare system. We aimed to identify how the Cumming School of Medicine's medical school application process selects for (or against) applicants with anti-Indigenous attitudes.

Methods: This cross-sectional survey measured explicit and implicit anti-Indigenous bias of applicants to the Cumming School of Medicine 2020-2021 application cycle. Explicit bias was measured using two continuous sliding scale thermometers, where participants indicated their feelings toward Indigenous people (0 indicating "cold", 100 indicating "warm") and whether they preferred white (score 100) or Indigenous people (scored 0). Implicit bias was assessed with an implicit association test. Applicants were stratified by application status (interviewed, offered a position, matriculated).

Results: Of the 988 medical school applicants who opened the survey, 595 students completed at least one question. Overall, applicants felt warmly toward Indigenous people (median 96; IQR 80-100), had no explicit preference for white or Indigenous people (median 50, IQR 37-55), and had mild implicit preference for European faces (median latency -0.22 ms; IQR -0.54 to 0.08 ms). Successful applicants less explicit and implicit anti-Indigenous bias compared to those not offered a position. Applicants with extreme 'outlier' anti-Indigenous bias scores were not offered a position.

Conclusion: This study represents the first effort to characterize implicit and explicit anti-Indigenous bias among medical school applicants. Applicants with stronger explicit and implicit anti-Indigenous biases were not admitted, suggesting that the current processes are effective in identifying those with views that are incompatible with working as a physician.

PFV 13-3

68036

Best practices for interviewing in medical education: a systematic review

Paul Greenberg The Warren Alpert Medical School of Brown University, **Curtis Margo** University of South Florida, **John Lin** The Warren Alpert Medical School of Brown University, **Anagha Lokhande** The Warren Alpert Medical School of Brown University

Background/Purpose: Medical school interviews enable admissions officers to gather important information about applicants' personal qualities. This systematic review investigates the effectiveness of different methods of conducting interviews for medical school admission to determine best practices.

Methods: Six databases were searched for English-language publications comparing medical school admissions interview methods through February 1, 2021. Study characteristics, measurement methodologies, and outcomes were reviewed. Quality appraisal was performed using the Medical Education Research Study Quality Instrument.

Results: Thirteen studies met inclusion criteria: four randomized controlled trials and nine comparative observational studies. The multiple mini-interview (MMI) was reliable, unbiased, and predictive of short-term student performance. Reducing the number of stations and conducting interviews virtually saved costs without impacting MMI reliability. Unstructured interview ratings were significantly influenced by gender, age, higher GPA, and higher Medical College Admission Test (MCAT) scores; blinding interviewers to GPA and MCAT reduced these biases without affecting reliability. Quality of evidence was above average for all studies, although there was substantial methodological and outcome between-study heterogeneity.

Conclusion: The MMI appears to be a valid, reliable interview method, including in virtual settings, but more rigorous study is needed to determine the effectiveness of interviews in predicting long-term student performance.

PFV 13-4

69401

Price Of a Dream (POD) Overview: Development of a national strategy

Mark D. Hanson University of Toronto, **Ike Okafor** University of Toronto, **Amira Abdalla** Ohio State University, **Justin Lam** University of Toronto, **Claudine Henoud** University of Ottawa, **Tobi Olaiya** McMaster University, **Farhan Mahmood** University of Ottawa, **Maisoon Yousif** Dalhousie University, **Chantal Phillips** University of Toronto

Background/Purpose: The Price of a Dream (POD) is an advocacy group formed in 2018 consisting of medical trainees, staff, and faculty from Canada and the USA. Canadian medical schools offer financial aid programs to support matriculant medical students from low socioeconomic status (SES) backgrounds. However, premedical student application financial support for low SES applicants and a coordinated approach at provincial and national levels are lacking. POD's goal is to eliminate financial barriers nation-wide for medical school applicants through a national strategy that addresses financial barriers at each application stage.

Summary of the Innovation: POD has partnered with and is funded by the Council of Ontario Faculties of Medicine (COFM) to advance a national strategy for premedical student financial aid in partnership with the Association of Faculties of Medicine of Canada (AFMC) and the Ontario Universities' Application Centre (OUAC). POD has implemented a MCAT fee waiver outreach program and the Ontario Medical School Application Fee Waiver program. Long term goals for POD include increasing transparency of admissions evaluation criteria, data collection tracking

applicants to matriculation to identify further opportunities for financial support, and reducing financial barriers to the residency application process for low SES trainees.

Conclusion: Through its partnerships with COFM, AFMC, and OUAC, POD has successfully mobilized programs that provide financial support for applicants from low SES backgrounds provincially and nationally, and will continue to advocate on its longer term goals. POD's structure including a project manager, perspectives from undergraduate and postgraduate trainees and faculty, and liaison with partnered organizations are keys to its current success.

PFV 13-5

68984

Virtualization of Post-Graduate Residency Interviews - A Transforming Practice in Healthcare Education

Ashlie Nadler University of Toronto, **Wanda Marini** University of Toronto, **Luckshi Rajendran** University of Toronto

Background/Purpose: Traditionally, post-graduate trainee selection in North America relied on in-person interviews. With the COVID-19 pandemic, a pivotal transition towards the virtualization of interviews has occurred. Virtualization has many acknowledged benefits. However, there are many challenges in implementation and transitioning to a new interview format.

Summary of the Innovation: Virtual one-day General Surgery Residency interviews were held at a single institution (University of Toronto) for the Spring 2021 interview period. The interview structure and logistics were adapted based on prior in-person experiences, as well as a fellowship virtualized interview approach. Interventions Pre-interview: The program was advertised through social media, virtual information sessions, and media presentations highlighting the program, residency life, and facilities. Interview: Multiple moderators, strong personnel support, clear instructions with schedules/information guides, and back-up plans were integrated. Peri-interview: Applicant files were anonymized and components disaggregated to reduce implicit bias, with an objective scoring system for ranking. Results The social media platform gained over 800 followers. Virtual information sessions were well received, with approximately 60 applicants at each session. The number of applicants was comparable to previous years (189 total applicants). Interview day ran smoothly, with minimal technical delays, and feedback was overall positive. 8/10 trainees that matched to our program were from our home institution.

Conclusion: Evidence exists for continuing virtual interviews in the post-pandemic era. However, lack of in-person exposure is a challenge, and may contribute to preferential matching of candidates from home institutions. Formal survey exploration is required to better understand and address barriers to virtualization.

PFV 13-6

69457

Do I need research experiences to get into medical school? : An analysis of medical school admission policies concerning research involvement in Canada

Laurie Yang McMaster University, **Irene Chang** McMaster University, **Stacey Ritz** McMaster University, **Lawrence Grierson** McMaster University

Background/Purpose: Many aspiring physicians engage in research to support their medical school applications; however, the degree to which these experiences indicate commendable candidate qualities is unclear.

This study describes the ways in which Canadian medical school admission policies contemplate research experiences.

Methods: A qualitative descriptive approach was used to characterize the stance that medical schools portray about the importance of research experiences to candidate selection. This involved analysis of the admissions policies, required application materials, and institutional value statements of the 17 Canadian medical schools. Special attention was accorded to the concordance and/or discordance within each school's stance on the importance of research experiences in their selection criteria and application materials.

Results: Research experiences are typically not explicitly required for entry into a Canadian medical school; however, there are expectations that graduating physicians should understand research. While all Canadian medical schools signal an appreciation for research experiences on an institutional level, there is considerable intra-institutional and inter-institutional discordance concerning the articulated importance of research experiences in selection policy and application materials.

Conclusion: Given that admissions practices have a tremendous influence on the way prospective applicants allocate personal resources, it is important for Canadian medical schools to be clear about the value of research experiences in candidate selection. We consider the unintended consequences of current admission policies on applicants' behavior and how research experiences are not equitably accessible to all aspiring physicians.

PFV 13-7

69264

The invisible actors in medical school selection: Exploring the role MMI assessors play in widening access

Anna Macleod Dalhousie University, **Gaynor Watson-Creed** Dalhousie University, **Sarah Burm** Dalhousie University, **Racheal Pack** Western University, **Carolyn Melro** Dalhousie University, **Andrea Rideout** Dalhousie University

Background/Purpose: Widening access (WA) to medical school admission remains both an enduring challenge and increasing priority. While medical schools have implemented various initiatives designed to improve access among equity-seeking groups, we know little about how these initiatives are operationalized and perceived by various social actors in the admissions process. Herein we discuss the hidden expertise and insights that Multiple Mini Interview (MMI) assessors can contribute to the conversation around WA.

Methods: As part of a larger case study critically investigating the social (people, discourses) and material (policies, assessment tools) realities influencing equitable recruitment, we interviewed 10 MMI assessors at an urban medical school to gain unique insight into their perceived role in WA for equity-seeking groups. Data was analyzed iteratively using a thematic analysis approach.

Results: Many assessors expressed concerns over socioeconomic and racial diversity in medicine; this dissatisfaction with the 'status quo' fueling their decision to contribute to the selection process and think deeply about the interplay of societal, cultural, and systemic factors influencing admission decisions. Assessors demonstrated awareness of their 'blind spots' and described the mitigation strategies they used to provide objective and fair appraisals.

Conclusion: Our analysis reveals that MMI assessors are committed to WA and are thoughtful in their contributions to the selection process. A carefully built medical school selection process, inclusive of the expertise of assessors is an important step in WA. Medical schools must think 'outside the box' about the role social actors play in WA.

PFV-14: Assessment

Virtual 1

PFV 14-1

69560

[Assessment of Canadian Resident Matching Service (CaRMS)-Specific Stress in Undergraduate Medical Students](#)

Luke Burke Dalhousie University, **Bright Huo** Dalhousie University, **Mark Bosma** Dalhousie University, **Cheryl Murphy** Dalhousie University

Background/Purpose: Each year, graduating medical students apply through the Canadian Resident Matching Service (CaRMS) to enter a residency program. However, the impact of this process on medical student stress is not well understood. The goal of this study was to identify the presence and prevalence of CaRMS-specific stress and specific CaRMS-related stressors in Canadian undergraduate medical students.

Methods: An online survey was distributed to all undergraduate medical students at Dalhousie University. Students reported their CaRMS-specific stress using a modified DASS-21 questionnaire, a validated tool for the assessment of stress. Differences between pre-clerkship and clerkship students were examined with t-tests.

Results: In total, 125/470 (26.6%) students completed the survey. Students reported that CaRMS is a stressful process (94.4%). Self-reported CaRMS-specific stress (p < 0.001), DASS-21 CaRMS-specific stress scores (p < 0.001), physical manifestations of stress (p < 0.001), and effect of CaRMS-specific stress on wellness (p < 0.001) were significantly higher in clerkship vs. pre-clerkship students. CaRMS-specific stressors were also identified, with the most highly ranked stressor being going unmatched (75.2%).

Conclusion: Our results confirm that CaRMS is a stressful process and describe the CaRMS-specific stressors affecting medical students at different stages of undergraduate training. This knowledge can help guide implementation of preparatory and supportive programming throughout the medical school curriculum.

PF 14V-2

69452

[Validation of a surgical objective structured clinical skills examination (S-OSCE) using convergent, divergent, and trainee-based assessments of fidelity](#)

Glen Richardson Dalhousie University, **Adele Orovec** Dalhousie University, **Andrew Glennie** Dalhousie University, **Stephanie Scott** Dalhousie University, **William Oxner** Dalhousie University

Background/Purpose: To describe the validation of a surgical objective structured clinical examination (S-OSCE) for the purpose of competency assessment based on the Royal College of Canada's Can-MEDS framework.

Methods: A surgical OSCE was developed to evaluate the management of common orthopedic surgical problems. The scores from this S-OSCE were compared to Ottawa Surgical Competency Operating Room Evaluation (O-SCORE), a previously validated entrustability assessment, to establish convergent validity. The S-OSCE scores were compared to Orthopedic In-Training Examination (OITE) multiple choice question scores to evaluate divergent validity. Resident evaluations were scored on a 10-point Likert scale for fidelity.

Results: There were 5 OSCE days, over a 4-year period, encompassing a variety of surgical procedures. Performance on the surgical OSCE correlated strongly with the O-Score (Pearson correlation coefficient 0.88), and a linear regression analysis correlated moderately with year of training (R² = 0.5345). The Pearson correlation coefficient between the surgical OSCE and the OITE scores was 0.57. Resident scores were

available from 16 residents encompassing 8 different surgical cases. The average score for the overall simulation (8.0±1.6) was significantly higher than the cadaveric surgical simulation (6.5±0.8) (p<0.001).

Conclusion: The surgical OSCE scores correlate strongly with an established form of assessment demonstrating convergent validity. The correlation between the S-OSCE and OITE scores was less, demonstrating divergent validity. Although residents rank the overall simulation highly, the fidelity of the cadaveric simulation may need improvement. Administration of a surgical OSCE can be used to evaluate preoperative and intraoperative decision making and complement other forms of assessment.

PFV 14-3

69578

[Assessing health profession education trainees using reported observations: A scoping review](#)

Marie-Eve Poitras Université de Sherbrooke, **Patricia Blanchette** Université de Sherbrooke, **Christina St-Onge** Université de Sherbrooke

Background/Purpose: Decisions about trainees' progression occur more frequently in the context of assessment informed by reported observations. But we know little about this type of assessment, such as benefits and pitfalls. A first step to maximize its benefits and limit negative unintended consequences, is to make explicit its operationalization. We aimed to capture the breadth and depth of the literature regarding the use of reported observations in HPE.

Methods: We conducted a scoping review informed by the first five steps of Arksey & O'Malley. Following a standardization (at least 90% agreement between coders), two team members performed inclusion/exclusion and the data extraction. We conducted descriptive statistics for numerical data (eg. trainee's discipline) and thematic analysis for qualitative data (eg. operationalization).

Results: 5 466 documents were identified in four databases, and 36 met our inclusion criteria for full text review. We identified six steps that characterize the trainees' performance assessment informed by reported observations: 1) observation, 2) documentation of observation, 3) collection of information, 4) triangulation of information, 5) documentation of the decision and 6) communication of the decision. The available information about trainee's performance is an example of barrier/facilitator. A large amount of information to synthesize is an example of the challenges involved in this type of assessment.

Conclusion: Our results provided us a better understanding of the elements to consider in assessments based on reported observations, and further understanding of assessor cognition. Understanding these elements is the first step, to support those engaged at all steps of assessment informed by reported observation.

PFV 14-4

67910

[Perspectives of Graduating Medical Students on Teaching and Assessing Procedural Skills](#)

Pardis Balari Queen's University, **Eleni Katsoulas** Queen's University, **Louie Wang** Queen's University, **Anthony Sanfilippo** Queen's University, **Akshay Rajaram** Queen's University

Background/Purpose: Despite advances in competency-based medical education, there remains a lack of guidance on specific procedural skills to be mastered by medical students. Previous studies have shown inconsistencies between preceptor expectations and students' level of

competency for various skills. Our study explores the perspectives of graduating medical students on current procedural skills training.

Methods: We electronically invited all graduating members of a single cohort of a Canadian medical school to identify, for 42 different procedural skills, whether the skill was required of a junior doctor, the level of competency to be achieved and the level of competency they believe they had achieved in each skill, and the number of clinical practice opportunities they believe were available.

Results: The response rate was 38% (39/104). Participants agreed on 17% of skills (n=7) to be required of junior doctors, including aseptic technique, basic cardiac life support, use of an automated external defibrillator, universal precautions, bag mask ventilation with oral and nasal airways, wound closure with suturing, and subcutaneous and intramuscular injections. Participants believed the highest level of competency to be required for universal precautions and aseptic technique. No consensus was reached for personally achieved competency levels. Participants also reported receiving fewer than four practice opportunities for 31% of skills (n=13).

Conclusion: Discrepancies exist between perceived and achieved competencies for certain procedural skills with limited practice opportunities reported for skills deemed as important. In addition to addressing teaching and assessment barriers, the scope of procedural skills training in undergraduate medical curricula should be reconsidered.

PFV 14-5

68512

[Analyzing the Administrative Burden of Competency Based Medical Education](#)

Benjamin YM Kwan Queen's University, **Andrew D Chung** Queen's University, **Christina Rogoza** Queen's University, **Kevin Cheung** Queen's University

Background/Purpose: All postgraduate residency programs in Canada are transitioning to a competency-based medical education (CBME) system. Competency-based design (CBD) articulates stage specific Entrustable Professional Activities, (EPAs), milestones, and frequent assessments. The model provides continuous feedback for the resident allowing them to build on strengths and address areas needing improvement in a timely manner. Queen's University Diagnostic Radiology Residency Program was an early adopter with the development of a curricular structure and an electronic portfolio system, Elentra,TM implemented in July 2017. However, faculty have expressed concern with the added administrative burden imposed by frequent assessments with detailed scoring systems. This study investigates the time to complete EPA assessments within the Department of Diagnostic Radiology at Queen's University in Kingston, Ontario, Canada between July 1, 2019 to December 31, 2020.

Methods: Data regarding time taken for 24 staff radiologists to complete EPA assessment forms was extracted and analyzed from the Elentra system. There are currently 12 CBME residents within the Radiology Program at Queen's.

Results: Our study found the average time to complete an EPA assessment form was 3 minutes and 6 seconds, with a median number of assessments completed at 27.5. Assuming 1-3 EPA assessments per week for each resident (n=12) and an even distribution amongst all available staff members, this averaged out to only an additional 18 minutes per staff member over a 4-week block period.

Conclusion: This study found that an average assessment completion time of 3 minutes is a reasonable burden considering the advantages afforded through the adoption of CBME.

PFV 14-6

69424

[Innovative Home Call Assessment Tool (HOCAT) for assessment of leaners on home call shifts](#)

Zachary Liederman University of Toronto, **Ibrahim Al Nabhani** University of Toronto

Background/Purpose: Consistent assessment and feedback are an integral part of residency training. However, in the case of residents who complete semi-independent home calls, there is reduced regular contact with supervisors making quality assessment and feedback challenging. Home calls also require residents to develop competence in domains not typically assessed by traditional metrics such as the end of rotation ITER. We developed a Work-Based Assessment (WBA) tool to assess trainees' performance during home call. Our goal is to provide an assessment standard and feedback framework to facilitate formative assessment for on-call activities.

Summary of the Innovation: The Home Call Assessment tool (HOCAT) was developed from pre-existing tools with additional domains tailored to subspecialty residency training. A detailed scoring rubric with context specific standards guide learners and assessors through the feedback process. A pilot implementation of the tool was conducted over three months with PGY4-5 hematology trainees at the University of Toronto. A mixed methods post-study survey is currently being completed to evaluate the tool and its administration.

Conclusion: The HOCAT is a promising new assessment tool designed to meet gaps in formative assessment of post graduate learners completing home call. A three month pilot was successfully implemented and work is underway to evaluate its impact and identify areas for improvement with the ultimate goal of larger scale implementation.

PF 14V-7

69437

[Can't touch this: designing a touchless physical examination for a virtual Objective Structured Clinical Examination](#)

Debra Pugh Medical Council of Canada, **Wassim Karkache** University of Ottawa, **Samantha Halman** University of Ottawa, **Christopher Tran** University of Ottawa, **Rui Nie** Medical Council of Canada

Background/Purpose: The COVID-19 pandemic has transformed education, with teaching shifting from face-to-face towards online learning. Similarly, performance assessments, including Objective Structured Clinical Examinations (OSCEs) have been adapted to virtual formats but with little evidence to guide whether physical examinations can or should be assessed virtually. In response, we developed a novel touchless physical examination station for a virtual OSCE and gathered validity evidence for its use.

Summary of the Innovation: A touchless physical examination OSCE station was pilot-tested in a virtual OSCE in which Internal Medicine residents were asked to verbalize their approach to the physical examination, interpret images and videos of findings provided upon request, and make a diagnosis. Differences in performance by training year were explored using ANOVA. Effect sizes were calculated using partial eta squared ($\eta p2$). In addition, data were analyzed based on a modified approach of Bloom's taxonomy of learning: knowledge, understanding, and synthesis. Sixty-seven residents (PGY1-3) participated in the OSCE. Scores on the pilot station were significantly different between training levels (F=3.936, p=0.024, $\eta p2$=0.11). The pilot station-total correlation (STC) was 0.558, and the item-station correlations (ITC) ranged from 0.115 to 0.571, with the most discriminating items being

those that assessed higher orders of learning (understanding and synthesis).

Conclusion: While the pandemic has forced educators to adapt quickly, it is important that we study resulting innovations to ensure the intended educational outcomes remain sound. Our study demonstrates that a touchless physical examination station was feasible, had acceptable psychometric characteristics, and discriminated between residents at different levels of training.

April 24, 2022, 14:45 MST

PFV-15: Teaching and learning

Virtual 1

PFV 15-1

69268

Identifying Skills and Competencies to Provide High-Quality Virtual Psychiatric Care to Trauma Patients

Clare Pain University of Toronto, **David Rojas** University Health Network, **Kanwarpreet Karwal** McMaster University, **Samantha Inwood** Women's College Hospital, **Robert Paul** University of Toronto

Background/Purpose: Psychiatrists have provided virtual care (VC) to patients via phone or videoconferencing for over a decade. Despite the development of this care modality, there is little information in the literature on considerations for treating trauma patients, the required competencies to provide effective virtual care to them, nor the educational needs to develop said competencies in learners. The COVID-19 pandemic's unique limitations to in-person care have provided an unprecedented opportunity to study VC with trauma patients. This project studied a virtual clinic specialized in psychological trauma to better understand their experiences with trauma patients and the skills and competencies needed to provide effective virtual psychiatric care.

Summary of the Innovation: Our site of study, the Psychological Trauma Clinic at Mount Sinai Hospital, Toronto, Ontario pivoted to a virtual format in March 2020. Using interviews with faculty, fellows and PGY-5s at or affiliated with the clinic, and an adaptive expertise lens, our team identified skills and competencies needed to provide effective care to trauma patients, clinician perceptions of VC, limitations to VC, and future considerations for VC training.

Conclusion: Our findings indicate that clinicians found virtually treating trauma patients to be feasible, and even productive. While there are several important considerations for treating trauma patients virtually, participants suggested that the skills and competencies required for VC are, for the most part, similar across patient populations. Lastly, we highlight the significance of adaptive expertise and resilience in a pandemic context, providing suggestions for training to support current and future psychiatrists in VC.

PFV 15-2

69404

Preparing medical students for clerkship clinical rotations in a post-pandemic era: leveraging blended learning

Kuan-chin Jean Chen University of Ottawa, **Sacha Weill** University of Ottawa

Background/Purpose: Traditional clerkship was challenged as COVID-19 accelerated the development of technology-enhanced learning (TEL). However, application of pedagogy principles while embracing TEL remained difficult in a post-pandemic era. To address these challenges, we took on innovative blended learning designs in the Transition-to-

Clerkship course to address challenges faced when preparing students for clerkship.

Summary of the Innovation: The Transition-to-Clerkship course leveraged blended learning: one-week of virtual learning with adult-centred pacing, one-week of experiential workplace learning, and one-week of outcome-based simulation workshops. While virtual learning is here to stay, social space remained vital, especially in interdisciplinary team-based learning. We allowed flexibility in curriculum delivery where time-spent did not equate material-learnt. Lectures were converted to synchronous web-enhanced learning. Virtual reality replaced hospital tours. E-learning modules were designed. Hybrid learning was used for skills sessions involving low- and high-fidelity simulations (e.g. phlebotomy videos and flipped classroom prior to workshop; virtual discussions and in-person simulations for clinical reasoning). Balance was sought to limit isolation associated with technology via face-to-face learning. Protected time allowed for integration and reflection. The added weight to workplace learning, despite the pandemic, was based on learners' felt needs: authentic, not perfunctory, clinical experience remained crucial in preparing students for a life as a physician.

Conclusion: We implemented blended learning design to prepare students for clerkship in a post-pandemic era. Innovation is needed to prepare students while ensuring constructive alignment in curriculum revision necessitated by COVID-19. Course evaluation is underway to ascertain that intended, hidden and informal curricula align to deliver a humanist physician.

PFV 15-3

69689

Assessing the Effectiveness of Virtual Near-peer Teaching (NPT) in Developing Clinical Reasoning

Menal Huroy McGill, **Lukas Shum-Tim** McGill, **Christophe Caron** McGill, **Jobanpreet Dhillon** McGill, **Sophy Mo** McGill, **Stuart Lubarsky** McGill, **You Jia Zhong** McGill, **Salima Ramdani** McGill

Background/Purpose: The COVID-19 pandemic has reduced bedside teaching and clinical exposure by limiting in-person activities. However, these experiences are crucial in developing clinical reasoning skills. As courses transitioned to a virtual format, student-led initiatives emerged to supplement the medical curriculum.

Summary of the Innovation: We created a virtual case-based initiative to prepare medical students for clerkship using near-peers to teach clinical reasoning. Students were guided through a case, encouraged to develop an approach to a chief complaint, establish a differential diagnosis, and commit to an impression and plan. From our pilot study, participants (N= 16) rated the session's quality 4.8 on a 5-point Likert scale. Sixty two percent of them reported they preferred near-peer led teaching compared to didactic teaching. They felt that near-peer facilitators provided a safe learning space which encouraged them to participate in the discussion.

Conclusion: While case-based teaching is common in medical curricula, its interaction with NPT has not been formally evaluated in the context of clinical reasoning. Given the widespread acceptability of our model, we aim to further validate it by comparing near-peer facilitators to faculty experts. A randomized study will be conducted on McGill second-year medical students with fourth-year medical students and faculty experts as facilitators throughout this academic year. This initiative has direct implications to health science education by evaluating new ways to structure curricula such as adopting NPT through a virtual problem-based approach throughout medical training.

PFV 15-4

69227

Comment s'initier aux fondements de la recherche dans un campus décentralisé?

Ayman Moustaine Université de Montréal, **Jean-Nicolas Dubé** Université de Montréal, **Marie-Hélène Girouard** Université de Montréal, **Lucas Leclerc** Université de Montréal

Background/Purpose: La culture de la recherche n'a pas été implantée au campus de l'Université de Montréal en Mauricie au moment de sa création, limitant l'accès aux projets des étudiants en médecine. L'absence d'une formation obligatoire en recherche dans le programme MD contribue au manque d'information et de compétences en recherche des étudiants. Un programme d'introduction à la recherche a donc été créé pour répondre à ce besoin.

Summary of the Innovation: Le cursus créé en 2015 est supporté par un clinicien-chercheur et est offert à tous les étudiants du campus décentralisé de la Mauricie. Environ 20% des étudiants suivent le programme. Les séances mensuelles abordent des thèmes successifs dans le domaine de la recherche, avec des concepts théoriques et pratiques sous forme de présentation interactive suivi d'échanges. Chaque étudiant est aussi soutenu, encadré et mentoré dans un projet de recherche. L'objectif principal du cursus est de donner des outils pour développer un projet de recherche ou pouvoir y participer. L'année culmine avec une présentation à la journée de la recherche.

Conclusion: Les étudiants sortent des cours avec une meilleure compréhension de la recherche et ont gagné en confiance pour démarrer des projets durant leurs études. Ce cursus hors programme MD est fort apprécié des étudiants et est repris chaque année depuis sa création. Il pourrait facilement être transposé dans un autre milieu. Nous prévoyons évaluer l'impact de cette formation sur le développement professionnel et la pratique future des étudiants.

PFV 15-5

69426

A mixed-methods study evaluating trainee experiences participating in a living systematic review for rheumatology guidelines

Chloe Lee University of Alberta, **Megan Thomas** University of Calgary, **Maede Ejaredar** University of Calgary, **Aliya Kassam** University of Calgary, **Glen Hazlewood** University of Calgary

Background/Purpose: Living systematic reviews require continual updates as new evidence is published, which is resource and time-intensive. Involving trainees in the process may ensure the sustainability of the review, while providing valuable experiential learning. This study was conducted to understand the experiences of participating in a living systematic review for rheumatology guidelines, and to evaluate the potential benefits in medical education outcomes for trainees.

Methods: We conducted a mixed-methods study to understand the experiences of trainees (undergraduates, medical students, residents, fellows, practicing healthcare providers, and researchers) who received task-specific training and participated in a living systematic review. Training included webinars, online modules, and instructional guides. Tasks included PICO annotation, data extraction, and quality assessment. Trainees were invited to complete a survey followed by an interview to elaborate on their experience. Survey and interview data were analyzed using descriptive statistics and Braun and Clarke thematic analysis, respectively, then triangulated to produce overarching themes.

Results: 21 trainees participated in the study (4 undergraduates, 4 medical students, 4 internal medicine residents, 5 rheumatology fellows, 3 practicing rheumatologists, 1 researcher). 20 trainees reported a

positive overall experience participating in the living systematic review. Perceived benefits of participating included learning opportunities, task segmentation, a supportive environment, international collaboration, and authorship or acknowledgements. Trainees also reported an improvement in their competency as a CanMEDS Scholar, Collaborator, Leader, and Medical Expert. Participants identified clear communication and technical difficulties as the main challenges.

Conclusion: Engaging trainees in a living systematic review facilitates sustainability and provides valuable opportunities for learners.

PFV 15-6

69471

Investigating the Gap in Clinical Skills: A Cross-Sectional Study Investigating the Utility of Clinical Abdominal Examination Skills in Practice.

Sophia Kerzner McMaster University, **Janhavi Patel** McMaster University, **Shreyas Sreeraman** McMaster University, **Randi Mao** McMaster University, **Dr. Jason Profetto** McMaster University

Background/Purpose: There is a discrepancy between clinical skills taught in Canadian medical schools and those used in practice (Kerzner et al., 2021). This study expands on a previous pilot study conducted at McMaster University investigating the clinical utility of physical examination maneuvers, now with a focus on the abdominal examination. The aim is to identify clinically relevant examination skills to focus studying and increase student competence.

Methods: We disseminated an online survey to physicians affiliated with the Hamilton Academy of Medicine with convenience and snowball sampling to determine the practical use of abdominal examination skills in the McMaster Clinical Skills guide. We conducted basic quantitative analysis on the utility of skills on a 5-point Likert scale and a binary question exploring whether physicians believe the skill should be taught to medical students.

Results: Of the 51 responses, the majority of physicians found all inspection and palpation skills to be useful in clinical and educational practice. A majority of physicians found auscultating for venous hum, friction rub, and liver scratch test to be not useful, and should not be taught. This response was similar between family physicians and general surgeons.

Conclusion: Majority of physicians found inspection and palpation clinical skills useful and found auscultation skills not very useful. There is no difference in utility and educational value of skills between different specialties, suggesting the importance of learning the skills for all medical students regardless of specialty chosen.

PFV 15-7

69631

Introduction to bedside ultrasound for medical students

William Baron Université Laval, **Kim Hoang Trinh** Université Laval, **Marie-Jeanne Morency** Université Laval, **Louis Miazga** Université Laval, **Anne-Lorie Laplante** Université Laval, **Sophie Goulet** Université Laval, **Marie-Laurence Côté** Université Laval, **Marie-Odile Caron** Université Laval, **Leila Adam** Université Laval, **Mathieu Robichaud** Université Laval, **Fannie Tremblay** Université Laval, **Antoine Bergeron** Université Laval, **Laura Chouinard** Université Laval, **Éliane Pelletier** Université Laval

Background/Purpose: Bedside ultrasound, as a screening tool, an adjunct to clinical assessment and guided procedures, has become an integral part of clinical practice in several medical specialties. Introducing medical students to its different uses and advantages prepares them to use this

imaging method efficiently and could therefore contribute to providing better care to patients in the future.

Summary of the Innovation: Four years ago, the Groupe de perfectionnement des habiletés cliniques (GPHC) at Université Laval (UL), in collaboration with Dr Claude Topping, an emergency physician, created a bedside ultrasound course whose content is adapted to preclinical medical students. This training consists of 9 sessions of 1 hour and a half each, where small groups of 4 students are paired with a medical resident. This 4:1 ratio ensures that all participants can handle the ultrasound equipment and really benefit from their instructor's expertise. The skills acquired during this course correspond to level 1 knowledge regarding bedside ultrasound in accordance with Collège des Médecins du Québec's guidelines. The students' theoretical and practical knowledge is evaluated through one exam at the very beginning and at the end of the training.

Conclusion: In addition to teaching the technical skills of bedside ultrasound, this course allows students to apply their knowledge of anatomy and of medical conditions in a more practical setting. No such training previously existed at Université Laval, making it a truly innovative project. At the end of the 9 sessions, participating students must complete a feedback form that could allow improvements in the future.

PV: Assessment/Continuing Medical Education/ Curriculum/Faculty Development/Inter-Professional Education /Learning Outcomes/Patient Safety/Physician & Medical Student Health and Well-Being/Postgraduate / Student Affairs / Teaching And Learning /Undergraduate

PV 1

69576

[Resident Supervision of Virtual Care Delivery During the COVID-19 Pandemic](#)

Kelly Howse Queen's University, **Sophy Chan-Nguyen** Queen's University, **Laura McDiarmid** Queen's University, **Morgan Slater** Queen's University, **Brent Wolfrom** Queen's University

Background/Purpose: The adoption of virtual care during the COVID-19 pandemic prompted the redesign of postgraduate training delivery. Yet, little is known about successful preceptorship in a virtual care environment. The aim of this project was to identify barriers to virtual trainee education and supervision to inform future training programs.

Methods: This multiple-method study has 2 phases. In phase 1, family medicine preceptors (n=186) and residents at Queen's University (n=75) were invited to participate in a survey. Participants provided their demographic information and rated their comfort versus skill levels associated with virtual care education via Likert scales. In phase 2, select preceptors and residents were invited to participate in focus groups and semi-structured interviews. Two coders employed thematic analysis using NVivo 10.

Results: 71 respondents (n=47 preceptors; n=24 residents) completed the survey (Response rate 25%; 32%). Preceptors perceived the transition to virtual care impacted their ability to supervise by a little (34.04%) and the preceptor-resident relationship was not at all impacted (40.93%). Residents felt the transition to virtual care did not at all impact supervisor access (62.50%) and it was very easy to review virtual visits with preceptors (41.67%). Major themes between the 2 cohorts: no change in supervision, no impact on preceptor-resident relationship, dedicated supervision time needed.

Conclusion: Despite the rapid of adoption of virtual care, preceptors and residents perceived that the quality of resident supervision was not greatly impacted. Future research should focus on how virtual supervision can be optimized to better improve resident and preceptor experiences.

PV 2

69636

[The Virtual Otolaryngology Bootcamp: Postgraduate foundational training then, now, and beyond](#)

Kevin Fung Western University, **Palak Suryavanshi** Western University, **Megumi Gates** Dalhousie University, **Christopher Chin** Dalhousie University, **Kathryn Roth** Western University, **Palak Suryavanshi** Western University

Background/Purpose: Surgical "bootcamps" for foundational skills were first described in the field of Otolaryngology (OtoHNS) in 2011. Skills taught at the bootcamps involve high-stakes procedures and emergency scenarios. The first Canadian national OtoHNS Emergencies bootcamp was held in 2011; and has since been an annual event with novel task-trainers, cadaveric models and simulations paired with advocacy-inquiry debriefing. This course was successful due to hands-on experience with guided instruction and small group teaching from experts. Due to the coronavirus pandemic, the 2020 and 2021 courses were virtual.

Summary of the Innovation: Prior curriculum was developed from needs assessments, followed by successive iterations of content expert and participant program evaluation. Each task trainer was individually evaluated with pre and post knowledge or technique assessments. Simulation scenarios and debriefing were assessed using Non-Technical Skills for Surgeons (NOTSS), and linked to CBME milestones. The virtual edition consisted of pre-reading with video demonstrations, interactive content expert talks, and case-based learning. This edition included live demonstrations of emergencies such as peritonsillar bleeding, management of pediatric foreign body from the operating room and more. Participants grew to include Anesthesia and Emergency Medicine residents. This virtual version was evaluated using mixed methods including pre and post surveys, and focus groups regarding level of realism, interactivity and future on-line innovation.

Conclusion: The virtual iteration of the national OtoHNS bootcamp was effective in increasing resident confidence levels across several disciplines. A future hybrid model is planned to further promote multidisciplinary participation and increase time spent in hands-on practice opportunities.

PV 3

69509

[7 years of Online Course Delivery in Faculty Development: Patterns and Perspectives](#)

Lara Hazelton Dalhousie University, **Susan Love** Dalhousie University, **Owen Connolly** Dalhousie University

Background/Purpose: Faculty development is essential for medical education but it can be challenging to engage faculty. We reviewed evaluation data from online faculty development courses offered at Dalhousie from 2014 - 2020 in order to identify factors that contribute to participant satisfaction.

Methods: Data from online faculty development courses were compiled and analyzed. Thematic analysis was applied to narrative feedback. We calculated average scores for satisfaction with items such as the online format, discussion boards, balance of interactivity and self-study, whether programs met expectations and/or enhanced knowledge, and applicability of course content.

Results: Eight separate courses were offered 32 times in total. There were 805 registered participants and 493 completers for a completion rate of 61%. Overall, satisfaction was high, with a significant majority of participants indicating a willingness to take more faculty development programs online. The lowest-rated component of the classes were large group sessions (such as class orientations and wrap-ups) which did not specifically teach course content. Interactivity was a highly-appreciated aspect, and in those cohorts in which there was less discussion board participation, course satisfaction appeared lower. Some negative comments about the courses related to technology issues, including technical literacy challenges on the part of participants and difficulties accessing materials.

Conclusion: Faculty development online courses appear to be an acceptable format for participants. High interactivity and an accessible user-interface appear to be important influences on participants' willingness to continue taking online courses.

PV 4

69624

Let the data do work: Automating aspects of preceptor recruitment for UME teaching

Sarah Weeks University of Calgary, **Erin Weir** University of Calgary, **Doug Hall** University of Calgary, **Mike Paget** University of Calgary, **Mike Cheshire** University of Calgary

Background/Purpose: Two facts about our MD program always surprise university administrators. First, we have over 5000 clinical faculty. Second, we run over 4000 structured teaching events in our pre-clerkship a year. It is a Sisyphean effort by program coordinators who are recruiting for these events. For preceptors, signing up for events meant a lag between requesting participation and confirmation. At the Cumming School of Medicine, we have a system for cataloging and managing those faculty, as well as a Learning Management System based on Elentra.

Summary of the Innovation: A new mechanism was created for program coordinators to access up -to -date preceptor records and invite them to participate in teaching in bulk. They were able to select based on a number of criteria: Teaching Awards, Department affiliation, and Payment Eligibility. Preceptors were able to select and confirm themselves into teaching slots immediately. As the recruitment went on, coordinators were able to expand the recruitment pool to include a broader list of faculty until the request was filled.

Conclusion: This system has been successfully recruited 487 unique preceptors for over 2000 teaching events. Those faculty received an average of 62 days notice for a teaching opportunity. Feedback from program coordinators as well as faculty has been overwhelmingly positive. The recruitment system given a course level "Behind the Scenes" Award. This is a significant improvement for the process of recruitment. Additional next steps include recruitment statistics for Faculty Annual Reports, further automation, and increased teaching opportunities for Teaching Award winners.

PV 5

69632

A Social Network Analysis of Medical School Connections between UGME and PGME programs.

Janeve Desy University of Calgary, **Christopher Naugler** University of Calgary, **Mike Paget** University of Calgary, **Adrian Harvey** University of Calgary

Background/Purpose: Although statistics on the numbers of students that move between Canadian training programs to pursue postgraduate training are easy to access, how well do we understand these national patterns of graduate movement? An easy to process visualization of this data can provide a way to trends and patterns in the national movement of graduates within the country.

Methods: A social network visualization was done using Cytoscape, an open-source platform for visualizing complex networks and attribute data. Data was pulled from the CaRMS website and included information on Undergraduate and Postgraduate program location for all students participating in the national CaRMS match over the last seven years (2015-2021). A bounded network of all the schools in Canada was drawn, with line width representing the graduates who went from a school of medical graduation (origin) to a school of residency (insertion). A colour palette was applied to institutions based on regions to identify those connections.

Results: Social network visualizations are easy to digest visualizations of the movement of medical trainees between centres within Canada. Strong connections, like Queen's and University of Toronto are discernable. Over the past seven years, the Francophone schools had the lightest connections with Anglophone schools. There is a lot of variance in local match levels across the country.

Conclusion: Social network visualization provides a mechanism to explore a dataset that is difficult to interpret. This visualization may illuminate areas that are unseen in single year match results. This process reveals net loss or gain by region and may focus career/elective counselling.

PV 6

69701

Machine Learning for Predicting MCC Pass or Failure from Pre-Clerkship Exams

Kevin McLaughlin University of Calgary, **Janeve Desy** University of Calgary, **Christopher Naugler** University of Calgary, **Adrian Harvey** University of Calgary, **Mike Paget** University of Calgary

Background/Purpose: Predicting MCC success from exam performance at the Cumming School of Medicine has previously indicated the value of intervention with mentoring for low performance or failing students. This intervention has significant resource allocation challenges as individual faculty time is required per student. Improving the accuracy of our forecasting would help manage our resources.

Methods: Preclerkship summative multiple choice question exam scores for 460 graduates from 2018 through 2020 were assembled along with their MCC outcome data (Pass or Fail) and score. A multilayer perceptron artificial neural network (ANN) was constructed using SPSS statistical software.

Results: The ANN classified student MCC outcomes correctly 98.5% of the time, but only predicted one of the three failures in the testing partition. For the numeric scores, the model had excellent reproducibility between training and testing data partitions (relative error .520 and .557 respectively). The predictive power of the ANN was superior to previous regression-based models.

Conclusion: This proof of principle ANN suggests that machine learning may present a new paradigm for predicting undergraduate medical school performance. Further work will enlarge the input data set to include other summative and formative measures.

PV 7

69489

Real Time Question-Based Learning for Continuing Professional Development: A multidisciplinary and virtual approach to multiple choice question development and review process for a novel mobile application

David Wiljer University Health Network; Department of Psychiatry & Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, **Alex Zisman** University Health Network, **Melody Zhang** University Health Network, **May-Sann Yee** Southlake Regional Health Centre, **Tran Truong** University Health Network, **Katherine Sue** University Health Network, **Herm Sidhu**, **Marcos Silva Restrepo** University of Toronto, **Tina Papadakos** University Health Network, **Janet Papadakos** University Health Network; Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, **Alexandra Rotstein** University of Toronto, **Peter Slinger** University Health Network; University of Toronto, **Tharshini Jeyakumar** University Health Network, **Sarah Younus** University Health Network, **Michael Baxter** University of Toronto, **Craig Campbell** The Royal College of Physicians and Surgeons, **Rebecca Charow** Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto; University Health Network, **Meredith Giuliani** University Health Network; Department of Radiation Oncology, University of Toronto, **Jesse Goldmacher** University Health Network; University of Toronto, **Inaara Karsan** University Health Network; Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto

Background/Purpose: One proliferating continuing professional development (CPD) method to improve knowledge transfer are question-based learning interventions, which use repetition to improve knowledge retention. Given the rise in question-based learning, this study aims to outline the question development process of a novel mobile application for CPD for anesthesiology and radiation oncology at UHN.

Methods: A master OneNote database was created to develop, store, collaborate, and track the progress of question development in real-time. Question authors were recruited by the co-investigators from the anesthesiology and radiation oncology departments at UHN. To ensure consistent and high-quality question development, the research team created and sent question authors tools to inform the question creation and revision process, which included guidelines and system parameters presented through video and PowerPoint. Each question was reviewed by two content experts from each specialty to validate and provide feedback on the content of the questions.

Results: 100 questions are currently being developed and reviewed for each specialty. Questions are designed to test physicians on their knowledge of key practice standards, guidelines, and foster clinical problem solving. The questions are developed in an iterative manner throughout the study to disseminate new practice information, as the emerging needs of clinical practice continuously evolve.

Conclusion: Question-based learning can enhance CPD activities that physicians need to provide safe and enriched quality of care. A peer-reviewed question development process can reflect well on evolving clinical practices of the respective specializations; this can be used to inform the development of future CPD programs for healthcare professionals.

PV 8

69645

Comparing patterns in low stakes workplace-based assessments submitted prior to and during COVID-19

Jonathon Lee University of Alberta, **Shelley Ross** University of Alberta, **Darren Nichols** University of Alberta, **Chris Donoff** University of Alberta, **Alyssa Fortier** University of Alberta, **Kiran Dhillon** University of Alberta, **Michelle Morros** University of Alberta, **Paul Humphries** University of Alberta

Background/Purpose: COVID-19 has altered family medicine patient care and learning environments, especially through increased virtual care, potentially changing the process and quality of assessment data about resident competence. Our local programmatic assessment framework includes electronic capture of frequent low-stakes assessments in the workplace through FieldNotes (FN). We examined FN entered by both residents and preceptors to identify any systematic differences in the assessment data collected before and during COVID.

Methods: We used secondary data analysis to compare FN entered between July 1, 2018 and August 31, 2021. All FN up to and including March 14, 2020 were coded as Pre-COVID (PC), the remainder During COVID (DC). Data visualization identified trends in FN variables in aggregate across all program sites.

Results: The dataset included 20.5 months of PC and 17.5 months of DC data (FN N= 20062). Mean monthly FN were similar between conditions (PC=520; DC=536). No large differences were found in percentages of FN for Progress Level, Clinical Domain, or Sentinel Habit (competency). Large differences were seen in resident-entered FN compared to preceptor-entered FN (PC: 45% vs 55%; DC 31% vs 69%).

Conclusion: Our assessment system appears robust: data generation was surprisingly consistent PC to DC, despite challenges of pandemic containment measures. The increase in preceptor-entered FN contradicted our assumption that preceptors would have less capacity for assessment, but was a welcome finding. The demands of the pandemic, including increased virtual visits, did not result in lower quality assessment. Future research includes examination of the data at the site level.

PV 9

69476

Perception of Quality of feedback culture and provider by Medicine Residents.

Tanweer Azher Memorial – University of Newfoundland

Background/Purpose: Feedback is the core component of training in the competency-based curriculum. The importance of recipient perception of feedback is recognized in education literature. (Higgins et al., 2001). Perception of feedback can be used to improve learners' satisfaction and growth in training. We used the validated FEEDME-Culture and FEEDME-Provider questionnaire (Bing-You et al., 2018) to gather knowledge about the culture of feedback at our institution.

Methods: Two questionnaires were distributed by survey software Qualtrics among the medical residency program at Memorial University. The anonymous data were directly collected by software and subsequently analyzed. The questionnaire includes questions about Feedback characteristics 10 items, Feedback delivery 6 items, Feedback provider characteristics 5 items, Feedback exchange 4 items. Feedback quality 4 items. Questionnaires required 10 minutes for completion electronically.

Results: • 36 questionnaires were distributed to medical residents. The response rate for the FEEDME-Culture questionnaire was 55% and the

FEEDME-Provider questionnaire was 41%. • Overall feedback was described as below average. • Lowest rated aspects of feedback were rated below the average included frequency of feedback, follow-up post feedback, lack of questions related to self-assessment of residents. • On the FEEDME-Provider questionnaire, residents reported overall and most aspects above average except for follow-up of feedback which was reported below average.

Conclusion: The questionnaire can be used to gather residents' perceptions of the quality and quantity of feedback. The questionnaires promote awareness about aspects of feedback. Attention can be focused on areas of weakness and assessment can be repeated after faculty development to improve resident satisfaction about feedback.

PV 10

69284

Diabetes Bytes: an educational tool on the diagnosis of diabetes and glycemic categories

Mohsen Eledrisi Weill Cornell Medical College-Qatar, **Rayaz Malik** Weill Cornell Medical College-Qatar, **Abdul Salam** Hamad Medical Corporation, **Bushra Laswi** Hamad Medical Corporation

Background/Purpose: The use of teaching tools can promote engagement and satisfaction, encourage collaboration and teamwork, and may help retain knowledge among learners.

Summary of the Innovation: We developed an educational tool "Diabetes Bytes" to assist medical students understand the interpretation of the diagnostic tests for the different glycemic categories. The tool requires learners to use matching between a group of glycemic categories including normal, diabetes and prediabetes on one side and a set of different numbers on the other side. We evaluated learner self-efficacy (via a 5-point Likert scale) and knowledge (via multiple-choice questions) on the diagnosis of the different categories of glycemia before and after the activity. Formal evaluation of the activity was conducted by answering a survey at the end of sessions and providing written comments. One hundred and thirty third-year medical students participated in individual 1-hour sessions that included 12-14 learners divided into 4 teams during the Internal Medicine clerkship. All learners demonstrated improvements in knowledge, with the mean score on the knowledge assessment increasing from 59.7% to 90.5% (p <0.001) after the activity while the percentage of confident learners increased from 17.7% to 93% (p <0.001). Formal evaluation showed that the majority of learners (rating 4.80/5) felt the activity was valuable as an educational experience and was more effective than a classic lecture-style format (rating 4.73/5).

Conclusion: The Diabetes Bytes tool demonstrated significant improvement in self-efficacy and knowledge among medical students along with high rates of satisfaction, indicating that it improves skills and confidence in the diagnosis of the glycemic categories.

PV 11

69291

Assessing the impact of faculty development on clinician-teachers' teaching practices

Veronique Castonguay Université de Montréal, **Julie Grandmaison** Université de Montréal, **Ahmed Moussa** Université de Montréal

Background/Purpose: Evaluating the impact of a faculty development (FD) training program is essential. The Centre for Applied Education in Health Sciences (CPASS, UdeM) developed a faculty development curriculum to meet the needs of clinician-teachers. Based on a competency framework inspired by the Harden & Crosby roles, the clinician-teacher curriculum offers training to all faculty in the main

educational themes. An evaluation was carried out to explore the impact of the FD curriculum on educational practices of participants.

Methods: This single center prospective study was carried out at Université de Montréal between October 2019 and June 2021. A reflective short-answer questionnaire on changes in teaching practices was sent by email to all registered participants three months after each FD course. Descriptive statistics and thematic analysis were carried out.

Results: On 702 participants, 142 (20%) responded to the questionnaire. More than 80% of respondents reported that they had made one or more changes to their teaching practice, and 80% believed that the training had an impact on the learning of students they had supervised. The nature of the responses obtained are very diverse but fall into three phases of clinical teaching: before (importance of planning, preparation, adapting to learners, etc.), during (types of supervision, coaching, teaching methods, descriptive feedback, etc.) and after (reflection, evaluation, etc.).

Conclusion: These results illustrate the positive impact of FD on clinician-teachers self-reported teaching skills. Improvements in actual teaching practices should be assessed in the future by seeking learners' point of view.

PV 12

69326

Hook 'em, Teach 'em, Assess 'em: Supporting Learners' Educator Professional Identity Formation through a Medical Education Track

Taryn Taylor Emory University School of Medicine, **Ulemu Luhanga** Emory University School of Medicine

Background/Purpose: Recognizing the need for clinicians with expertise in methods of instruction, medical schools have developed educator development programs for faculty, fellows, and residents. While these programs aim to impart knowledge and promote skill acquisition, their impact on participants' educator professional identity formation (PIF) remains a gap. The Medical Education Track (MET), an 18-month program, was developed to support multidisciplinary residents and fellows to gain the knowledge, skills, and methods necessary to become scholarly teachers and prepare them for careers as medical education scholars. Through this program we explored the evolution of our participants' educator professional identity formation.

Methods: As part of a longitudinal, formative evaluation study and in alignment with the four quadrants of the educator professional identity formation framework, we collected data in 2018-2019 and 2019-2020 from study participants through a combination of self-assessments, peer assessments, end-of-program surveys, and semi-structured interviews.

Results: To date, we have had 24 MET participants across two cohorts representing 7 residency programs and 3 fellowship programs. 20 of 24 (83%) participated in the study. Results showed participants achieved several steps in their educator PIF: acquiring a research-based knowledge of teaching, demonstrating their personal knowledge in a shared context, and making their acquired personal knowledge public.

Conclusion: Opportunities for learners to participate in experiences that move them through all four quadrants of the educator professional identity formation framework is key to supporting the development of clinician educators.

PV 13

69369

[Patient Safety: A Novel Flipped Classroom Curriculum for Family Medicine Residents](#)

Roger Suss University of Manitoba, **Aaron Jattan** University of Manitoba

Background/Purpose: Recognizing and responding to harm caused by healthcare delivery remains a challenge and a necessity for all physicians. However, preparation for this has remained a gap in the training of family medicine residents. In response, the College of Family Physicians of Canada (CFPC) has included competencies regarding patient safety as a part of accreditation standards for residency training programs. Medical schools now must provide education to residents both on how to appropriately respond to patient safety incidents and how to promote patient safety within the clinical environment.

Summary of the Innovation: In response, the University of Manitoba has developed a novel flipped classroom workshop to meet the competencies outlined by the CFPC and to ensure that learners are ready to recognize and respond to patient safety incidents upon entrance into practice. Learners initially review the key features of the Canadian Incident Analysis Framework, including how to immediately respond to and how to analyze a patient safety incident. Subsequently, this foundational knowledge is used in an in-person case-based workshop where residents hypothesize networks of causative factors for safety incidents and develop high-leverage action plans to prevent future incidents. All residents have suggested in their anonymous evaluations that the workshop has met the outlined learning objectives, which are mapped to the CFPC competencies, and that the skills acquired would be relevant to their future careers as family physicians.

Conclusion: Ultimately, this interactive workshop demonstrates a unique and successful approach to delivering a patient safety curricula that satisfied both learners and accreditation standards.

PV 14

69039

[A qualitative study exploring the beliefs and understanding of advanced care planning (ACP) or advance directives(AD) within members of the South Asian (SA) community.](#)

Amrish Joshi University of British Columbia, **Lara Musa** University of British Columbia , **Sukaina Kara** University of British Columbia , **Olina Wang** Vancouver Coastal Health, **Enrique Fernandez Ruiz** Vancouver Coastal Health

Background/Purpose: The SA community being the largest visible minority group in Canada, we lack research detailing the appropriateness of the SICG, its language, and terminology with English-speaking Canadians of SA origin. The study will explore the effectiveness of the SICG to improve ACP/AD discussions amongst SA Canadians.

Methods: Focus group interviews were transcribed and analyzed; and the quantitative data was also analysed.Interpretative thematic analysis approaches were conducted to capture key themes and facilitate rich descriptions for how the SICG can be used in ACP/AD discussions with patients and their families of SA origin.

Results: Qualitative Results Two main theoretical constructs were identified: 1. Cultural 2. Practice Based Within these theoretical constructs we had themes and sub-themes: Cultural (six main themes): Religious; Communication within families; Autonomy versus paternalism; Acculturation; Different Health Care Systems; Death as Taboo. Practice Based (Three themes): Patient and Physician Relationship; ACP/ ACD Approach; SICG Structure. Quantitative Results A total of 18 participants were recruited and over 70% were from the ages of 18-50. Over 50% had

a university degree. All of the participants self-identified as belonging to a religious community. Even though over 66% had heard of ACP/AD none of the participants had a will prepared.

Conclusion: Our study group confirms that there needs to be a cultural lens to the use of Western tools, such as the SICG, when facilitating ACP/AD discussions. Our study also identifies language and approaches that could hamper or facilitate such discussions - laying the foundation for more work and research in optimizing clinician cultural competency.

PV 15

69255

[Observational cohort study of an online musculoskeletal ultrasound course](#)

Diane Wilson, **Chris Penney** University of Calgary, **Ryan Brydges** University of Toronto, **Lynfa Stroud** University of Toronto, **Shirley Lake** University of Toronto

Background/Purpose: Most diagnostic medical ultrasound (US) education courses require didactic as well as clinical components. However, many learners may not have access to expert teachers. Moreover, COVID-19 has created a learning environment where meeting in-person is not possible due to potential risks. The Canadian Rheumatology Ultrasound Society (CRUS) online Musculoskeletal (MSK) US course addresses these needs by developing an online course with location and time flexibility, ongoing graded homework with personalized feedback, and one on one coaching. This study provides individuals within any clinical profession insight into online delivery methods that produce entry level MSK ultrasonographers. It also alerts educators of struggles that could hinder progress.

Summary of the Innovation: Participants attended two weekends (October and March), in-person (2018-2019 cohort) or on-line (2020-2021 cohort). All were asked to submit US images every 2 weeks for 3 to 5 months after each weekend, for which they received written feedback from expert faculty. As a part of the on-line instructional approach, participants also had the opportunity to meet one-on-one on zoom with assigned mentors. We compared the percentage of participants who submitted any US homework images, and the overall homework completion rate. Two independent, blinded reviewers scored a sample of submitted US images using published criteria.

Conclusion: The two cohorts had similar rates of participation, though the online cohort did complete a greater percentage of their US homework. We expect few difference in their acquired MSK US skills, which may influence course planners as they consider a return to in-person teaching beyond the pandemic.

PV 16

69382

[Evaluating the orientation experience for IMGs entering PGY1 Psychiatry Residency- A QI Project](#)

Sanjeev Sockalingam University of Toronto, **Joo-Young Lee** University of Toronto, **Maaria Arif** University of Toronto, **Certina Ho** University of Toronto, **Petal Abdool** University of Toronto

Background/Purpose: International Medical Graduates (IMGs) represent a heterogeneous group of trainees that face unique challenges. Several studies identify these challenges, which include communications issues, isolation and immigration issues. A needs assessment of Canadian IMGs was published in 2009 and informed the Transition to Residency orientation curriculum. Since 2016, no follow up was done to assess IMG perception of this half-day orientation and gather qualitative data on how it helps with longitudinal challenges. In addition there has been no

exploration of experiences of discrimination or inequities and how IMGs should be supported during orientation.

Methods: A Focus Group Guide was designed and used in two virtual focus groups with IMG Psychiatry Residents. Residents unable to attend the focus group were offered email responses to the focus group questions or individual virtual interviews. Two independent reviewers reviewed the transcript to perform a thematic analysis to analyze and summarize key findings.

Results: When this study was conducted 29 IMG residents were enrolled in Psychiatry. Eight residents attended each focus group and four had 1:1 meetings. This reflected a 68% response rate. Emerging themes included a recommendation for more networking and mentorship opportunities, less overlap with existing non-IMG orientation content covered elsewhere and for continued wellness supports. Residents also expressed a desire for increased support around discrimination and exposure to micro-aggressions from Faculty.

Conclusion: This study identified key areas for improvement and provided insights into needs related to discrimination. This data can inform curricular changes to improve the IMG orientation program to better support IMGs transitioning into residency.

PV 17

69521

Overview and preliminary results of the SOFTVETS project

Christin Kleinsorgen University of Veterinary Medicine in Hannover, Foundation, **Joze Rugelj** University of Ljubljana - Faculty of Education, **Míra Mándoki** University of Veterinary Medicine Budapest, **Jelka Zabavnik Piano** University of Ljubljana - Veterinary Faculty, **Lada Radin** Faculty of Veterinary Medicine University of Zagreb, **Rudolf Dömötör** Vienna University of Economics and Business, **Evelyn Steinberg** University of Veterinary Medicine Vienna, Office of the Vice-Rectorate for Study Affairs, Vienna, Austria

Background/Purpose: According to research and surveys among veterinarians, there is an increasing demand for the introduction of life skills training in veterinary education. Life skills are essential for an effective performance in everyday situations but also part of continuous modernization of the veterinary profession. New forms of employability, flexibility and security for veterinarians are necessary for thriving of the profession. The SOFTVETS project aimed to create a framework that will enable veterinary students with skills to cope with challenges imposed on them by the ever changing world and the enormous strain the profession puts on them. The competence model and curriculum are therefore organized in three sections: communication, entrepreneurship and digital skills.

Summary of the Innovation: A set of competences was created through an iterative process of literature research, experts' discussions and reviews. This is followed by definition of learning outcomes and development of an ideal curriculum. Then, a training concept for education of teachers was designed and executed. Finally, within three veterinary establishments a pilot implementation of selected modules was conducted and evaluated.

Conclusion: The world around us is changing at a rapid pace, so is the veterinary profession. Teaching in medical and veterinary education is undergoing an exciting period of change. Veterinary education needs to address these challenges by focusing on critical thinking, communicating clearly, speaking out on veterinary-related societal issues, increasing leadership and business skills both on the undergraduate and post-graduate level. The project results serve as a guidebook, a beginning for implementing change into veterinary curricula.

PV 18

69527

A Breastfeeding Education Needs Assessment in Postgraduate Family Medicine at the University of Toronto

Natalie Morson University of Toronto, **Milena Forte** University of Toronto

Background/Purpose: Breastfeeding is accepted as the preferred form of infant nutrition and family physicians are ideally positioned to support breastfeeding families. The literature indicates that graduating family medicine residents are not confident in their clinical skills in this area.1 This study aimed to evaluate how well the current breastfeeding curriculum meets the educational needs of Family Medicine residents at the University of Toronto.

Methods: A needs assessment survey was distributed to 242 residents at University of Toronto's Department of Family and Community Medicine (DFCM) as well as to 35 recent graduates of one DFCM academic teaching site (173 surveys were completed). Only 39.5% of respondents felt well-prepared to support breastfeeding mothers. Focus groups were conducted with current residents (n=4) and recent graduates (n=8) to further explore educational needs and experiences.

Results: Clinical confidence levels varied among topic areas and available educational experiences varied significant between teaching sites. All experiences were reported to be somewhat/very helpful but exposure to breastfeeding classes and lactation clinics had the highest perceived educational value. The most significant barriers to learning included lack of clinical placements, clinical time constraints and lack of formal breastfeeding teaching. Focus group data revealed conflicting sentiments about the role of the family physician in breastfeeding support.

Conclusion: This study supports the need for a formal breastfeeding curriculum in postgraduate family medicine training to improve the clinical confidence of graduates. A more robust educational experience may also increase the likelihood that graduates consider supporting breastfeeding families as part of their role as a family physician.

PV 19

69630

Who had the Microphone?

Christopher Naugler University of Calgary, **Mike Paget** University of Calgary, **Kevin McLaughlin** University of Calgary, **Sarah Weeks** University of Calgary, **Janeve Desy** University of Calgary, **Adrian Harvey** University of Calgary, **Melinda Davis** University of Calgary

Background/Purpose: Early exposure to role models and mentors has been reported to influence medical student career choice. We wanted to know which departments had the most presence at the podium in our program, and if there was any association with the first-choice disciplines of students in the CaRMs match.

Methods: We cataloged all faculty lecture events and associated them back to clinical department via contract data. We chose the pre-clerkship lectures associated with the class of 2021. This data was associated with the clinical department as a percentage of total lecture time. Data from CaRMS for the class of 2021 first choice disciplines was used as a percentage of the class.

Results: Undergraduate medical students at the Cumming School of Medicine had pre-clerkship lectures from 376 unique faculty spanning most of the clinical departments at the University of Calgary. Department of Medicine faculty had the greatest percentage of lecture time (43% of total lecture hours). This distribution is not reflective of the distribution of matches available to students in the Canadian residency matching service (CaRMS). There was a mild positive correlation of 0.41 between the percentage of podium time distributed to each medical discipline and the

percentage of students ranking that as their first choice discipline in the CaRMS match for the graduating class of 2021. Several confounders exist, including the number of faculty associated with those clinical departments.

Conclusion: Department proportional representation at the podium in our pre-clerkship program differs from the discipline landscape in other domains like the residency match.

PV 20

69634

"Match Quality" as a new KPI for match success.

Mike Paget University of Calgary, **Adrian Harvey** University of Calgary, **Christopher Naugler** University of Calgary, **Kevin Busche** University of Calgary

Background/Purpose: The percentage of unmatched students is often imposed as a Key Performance Indicator (KPI) for Medical schools. However, this metric alone may obscure important information about the decisions made by students to achieve a successful match. The pressure on the CaRMS process has risen, partially because of a tightening ratio between graduates and positions. The purpose of this study is to propose a new KPI which includes applicant ranking of the matched discipline.

Methods: Data was collected from the CaRMs website for the years 2015-2021 and assembled into a single dataset based on school of graduation and year. Students who matched to a first, second, and third choice program were combined as a good match and compared to overall match rates. Finally, data for each of the 7 years was averaged within each school.

Results: Low-rank match was not correlated with overall match rates (Pearson correlation-0.050, p=NS). The metric of "Match Quality" therefore gives new and important information that is distinct from the overall match rate.

Conclusion: The addition of "Match Quality" as a KPI provides a greater differentiation of match results when comparing Schools of Graduation. Importantly, Match Quality gives information likely related to student satisfaction (hence Match Quality) rather than the current KPI of match success which only speaks to match quantity. Student satisfaction is a critical but largely unknown aspect of the interpretation of CaRMS match results. Knowledge about student outcomes in the match provides additional data for the assessment of Undergraduate Medical Education programs.

PV 21

69726

CANPREPP - Canada's Portal for Residency Program Promotion

Nada Strathearn The Association of Faculties of Medicine of Canada, **Ashley Mahoney** The Association of Faculties of Medicine of Canada, **Fran Kirby** The Association of Faculties of Medicine of Canada

Background/Purpose: The percentage of unmatched students is often imposed as a Key Performance Indicator (KPI) for Medical schools. However, this metric alone may obscure important information about the decisions made by students to achieve a successful match. The pressure on the CaRMS process has risen, partially because of a tightening ratio between graduates and positions. The purpose of this study is to propose a new KPI which includes applicant ranking of the matched discipline.

Methods: Data was collected from the CaRMs website for the years 2015-2021 and assembled into a single dataset based on school of graduation and year. Students who matched to a first, second, and third choice program were combined as a good match and compared to overall match

rates. Finally, data for each of the 7 years was averaged within each school.

Results: Low-rank match was not correlated with overall match rates (Pearson correlation-0.050, p=NS). The metric of "Match Quality" therefore gives new and important information that is distinct from the overall match rate.

Conclusion: The addition of "Match Quality" as a KPI provides a greater differentiation of match results when comparing Schools of Graduation. Importantly, Match Quality gives information likely related to student satisfaction (hence Match Quality) rather than the current KPI of match success which only speaks to match quantity. Student satisfaction is a critical but largely unknown aspect of the interpretation of CaRMS match results. Knowledge about student outcomes in the match provides additional data for the assessment of Undergraduate Medical Education programs.

PV 22

69415

Clerkship Ice Cream Rounds: Adapting to a Virtual Setting During the COVID-19 Pandemic

Pascale Gendreau McGill, **Sonia Rahimi** Université du Québec à Montréal, **Nathalie Saad** McGill

Background/Purpose: As part of McGill University's medical curriculum, the WELL Office (Wellness Enhanced Lifelong Learning) provides medical students with confidential support groups called Ice Cream Rounds (ICR's) facilitated by the faculty's wellness consultant. In these sessions, students discuss common struggles of clerkship with their peers and learn coping strategies. Due to the COVID-19 pandemic, these sessions have been offered virtually. The purpose of the present research was to examine differences in students' experiences between In-person ICR's versus Virtual ICR's.

Summary of the Innovation: Methods: After completing the ICR's, students in the In-person (2018-2019, N = 48) and Virtual sessions (2020-2021, N = 56) were asked to answer questions about their experiences during the ICR's such as (1) what did you learn?, and (2) what will you implement into your life? Students' responses were coded independently and as a team using thematic content analysis by identifying and refining themes emerging from the data. Results: The most common themes emerging in both groups were community/relatedness and awareness where students indicated learning that other students were also struggling during medical school. However, students in the Virtual ICR's (vs. In-person) indicated that they would implement more concrete coping strategies to improve their lives, such physical (exercise) and mental health improvements (self-compassion).

Conclusion: Conclusion: Both In-person and Virtual ICR's were effective in promoting medical students' wellness, but students in the Virtual sessions described more distinct methods of fortifying their well-being habits pertaining to their physical and psychological needs.

PV 23

69609

Peers for Peers Physician Wellbeing Support Program

Laura Foxcroft Western University, **Andrea Lum** Western University

Background/Purpose: The COVID-19 pandemic has caused a significant increase in physician burnout, highlighting the importance of developing programs to focus on physician wellness. The Peers for Peers faculty wellbeing program is a one-on-one support program designed by physicians and for physicians. It is the first of its kind in Canada based at an academic institution.

Summary of the Innovation: To describe the development of the Peers for Peers physician wellbeing support program and evaluate its feasibility and implementation over the first year. Phases of development 1) leadership team and program vision, 2) recruitment and training of wellbeing leads, 3) program launch, and 4) program sustainability. The results of the first year of the implementation of the Peers for Peers physician wellbeing support program are presented. The number of wellbeing leads expanded from 17 to nearly 40 over the first year of the program. More than 200 peer encounters were documented. Lessons learned: -Leadership to back you up -Need to have a leader that will do the work -Need to have back-end resources to be able to manage when you end up with a lead in crisis at 6pm on a Friday. Need to know your local, regional, provincial, and national resources on physician wellness and burnout. Challenges: having faculty members reach out to wellbeing leads, making connections during a pandemic when face to face interactions are very limited, wellbeing leads different age/academic level/life stage/gender from faculty members

Conclusion: This innovative peer support program showcases increasing and sustainable access by academic physicians.

PV 24

69202

Changing Needs in Residency Education: Reinvigorating a Wellness Curriculum

Leslie Flynn Queen's University, **Claire Weersink** Queen's University, **Andrew Hall** Queen's University, **Melanie Walker** Queen's University, **Amber Hastings-Truelove** Queen's University, **Louise Rang** Queen's University

Background/Purpose: The importance of physician wellness has gained increased attention in recent years. The Professional role, one of the seven key roles identified in the CanMEDS Framework, recognizes that to provide optimal patient care physicians must take responsibility for their own and their colleagues', well-being. Residency training programs are now examining how best to teach these non-medical expert skills. The Wellness, Resilience and Performance in Emergency Medicine (WRaP-EM) program is a Canadian adaptation of an Australian evidence-based wellness program implemented and evaluated at Queen's University.

Methods: A survey was distributed to all faculty, current residents, and graduates of the emergency medicine program since 2018 (n=68). Interviews were conducted with participants who self-selected from the survey (n=6). Quantitative data was analyzed using descriptive statistics. Qualitative data was thematically analyzed.

Results: Sixteen residents (88%) 'agreed' or 'strongly agreed' that wellness sessions were a good use of curricular time. Further, nine faculty (89%) indicated that wellness and career sustainability should be explicitly taught. Among former residents, 14 (79%) indicated that they would have benefited from a wellness curriculum during their residency. Strengths of the program included engaged faculty facilitators, opportunities for reflection, and social interaction. The timing of sessions for attendance and the need for diverse strategies to improve wellness were perceived limitations of the existing program.

Conclusion: Adapting the WRaP-EM program to a Canadian context was perceived as a good use of curricular time. Findings from this research will inform curricular changes to the next iteration of the WRaP-EM curriculum.

PV 25

69620

Student assessment of a debt intervention program for medical students

Dani Kilani University of Calgary, **Kyle Moxham** University of Calgary, **Christopher Naugler** University of Calgary, **Michael Paget** University of Calgary, **Karen Chadbolt** University of Calgary **Omer Mansoor** University of Calgary

Background/Purpose: Cumming School of Medicine students carry a higher debt load compared to many other Canadian medical schools. For the period 2016 to 2021, the mean debt of CSM students was $107,500 compared to the national average of $94,800. To help address concerns about dept and financial management, a new voluntary financial literacy program was implemented in 2016. The program includes discussion of: budgeting, loans, lines of credit, credit basics, interest rates, taxation, insurance, debt repayment, buying a home, saving for the future. The program was modified over time based on ongoing student feedback. The purpose of the study was to determine student satisfaction and the number of students accessing this program.

Methods: Data was recorded from 2016 to 2021. Participants were asked to rate the effectiveness of financial and debt management counseling.

Results: Participation in the program, as evidenced by the number of one-on-one student meetings, increased from 19 meetings in 2016 to plateau at 80-107 meetings per year in 2019-2021. Overall, the program was very well received, with a median satisfaction rating of 4.0 on a five-point Likert scale. During this, the median debt of medical students in 2020 at the Cumming School of Medicine changed from being above the national average to being in line with the national average.

Conclusion: A voluntary one-on-one student debt intervention program at the Cumming School of Medicine has been well subscribed and received positive feedback from participants.