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Oral Presentations

Block C

OC

EDI - Indigenous Health

OC-1-1 The effects of Equity, Diversity, and Inclusion (EDI) training workshops on perceptions of resident trainees

Sara Trincao-Batra, Memorial University

Background/Purpose: Learners from marginalized backgrounds are disproportionally represented in experiences of discrimination. Equity Diversity and Inclusion (EDI) curriculum development studies show that simulation sessions, improve readiness to respond to discriminatory comments in the workplace. A workshop was developed to lay the foundation for an EDI training curriculum in residency programs. Purpose: To assess the understanding of EDI-related topics in Canadian Residency Training Programs and to determine the efficacy of videobased simulation in knowledge acquisition pertaining to EDI topics.

Methods: Participants were Pediatric and Internal medicine residents at Memorial University of Newfoundland and the University of Calgary. Participants completed a pre-intervention survey to assess baseline knowledge. Participants watched videos developed by the University of Calgary on racism and gender inequity, followed by a facilitated discussion of the videos. They completed a post-intervention survey to assess level of knowledge gain.

Results: Most residents, 81%, felt the workshop increased the chance of responding to a microaggression that occurs to someone else in the workplace. Ninety six percent felt the workshop had given them tools on how to intervene in the case of a microaggression and 85% felt like they were probably and likely to use the tools received in the workshop in the future.

Discussion: Implementing a workshop on microaggressions into curricula should be a fundamental part of residency training programs. By creating workshops, residents can feel empowered to identify and respond to microaggressions in the workplace. This can help create a training environment that supports diversity and inclusion, thereby contributing to wellness and work satisfaction

OC-1-2 Experiences and Perspectives of Racism Among Trainees in Canadian Postgraduate Training Programs

Melin Peng Franklin, McMaster University

Background/Purpose: There is a paucity of literature on the impacts of race and racism on Canadian postgraduate medical trainees.

Methods: A survey of 40 questions was distributed to postgraduate medical trainees across Canada to identify experiences and perceptions of race and racism. Respondents answered using a 5-point Likert scale. Univariate and multivariate analyses were performed to explore the association between demographic factors and experiences of race and racism.

Results: There were 538 survey respondents, of which 44.2% (n=231) identified as black, indigenous or person of colour (BIPOC) and 52.2% (n=273) as members of visible minority groups. A large proportion of respondents reported racial discrimination (40.7%, n=196) and racial mistreatment (37.4%, n=180) during medical training, being mistaken for a non-physician (58%, n=279), and feeling their race negatively impacts their career prospects (19.6%, n=159). Many respondents reported that patients refused their care due to their ethnicity (21.5%, n=104). Most felt that their institution should recruit more faculty or allied health providers of colour (69.4%, n=323; 67.3%, n=313 respectively), and that their institution lacked adequate cultural sensitivity training for trainees or faculty (26.9%, n=125 and 26%, n=121 respectively).

Discussion: Our survey findings provide the first and broadest insight into race and racial discrimination in Canadian medical postgraduate training programs. Trainees clearly identify that racial discrimination occurs at both academic and clinical levels, which requires addressing in training programs nationally.

OC-1-3 Empowering Clinical Faculty by Removing Barriers to Academic Promotion

Bonny Dickinson, Mercer University School of Medicine

Background/Purpose: Adjunct, affiliate, and volunteer clinical faculty are essential to teaching medical students yet face barriers to academic promotion when compared with clinical and non-clinical faculty employed full-time by a medical school. This study describes the process and impact of one U.S. medical school's revision of three clinical promotion tracks to facilitate promotion for this important cohort of faculty.

Methods: Clinical faculty promotion tracks were streamlined by modifying qualitative and quantitative criteria to reflect clinical faculty contributions, providing an annotated curriculum vitae template with relevant examples, reducing the number of required letters of recommendation, and providing one-on-one support, virtual workshops, and "how-to" videos. The impact of successful promotion for clinical faculty was explored through individual semi-structured interviews and focus groups. Thematic analysis was used to analyze and describe the collected data.

Results: Themes emerging from clinical faculty interviews and focus groups data fell into three broad categories: (1) internal motivation to develop or maintain an academic orientation, (2) planning for future growth as an academic clinical educator, and (3) the inherent rewards and joy of engaging with learners.

Discussion: This study highlights how removing barriers to academic promotion for clinical faculty can support their orientation toward academic medicine, facilitate their planning to achieve higher academic rank, and fuel their inherent joy of educating learners. Medical school leaders should review institutional promotion processes to ensure they are inclusive and achievable for all faculty.

OC-1-4 <u>Projet A.I.M.: Briser les barrières de l'integration</u> <u>en Mauricie</u>

Nadine Dababneh, Université de Montréal

Background/Purpose: En 2022, 146 400 individus ont immigré au Québec, reflétant une tendance à la hausse dans la région. Cette augmentation continue constitue des défis significatifs en matière d'intégration et d'adaptation des immigrants, particulièrement prononcés en Mauricie, où la demande excède les ressources disponibles. Le projet A.I.M (Aide à l'Intégration en Mauricie) fut créé pour souligner cette problématique complexe, pour proposer des solutions d'intervention et des méthodes de sensibilisation, d'entraide et de soutien en se basant sur l'expérience des communautés immigrantes et marginalisées et pour évaluer l'impact des dix ateliers visant trois volets principaux. Le premier volet se concentre sur la socialisation; le deuxième se consacre à l'initiation à la vie au Québec et le dernier repose sur une sensibilisation liée à la promotion de la santé.

Methods: Une analyse de régression linéaire multiple fut employée pour étudier comment la participation à des ateliers spécifiques prédit les variations dans le sentiment d'intégration et l'accès aux soins de santé.

Results: Des données quantitatives et qualitatives ont été mesurées pour déterminer l'impact des ateliers sur trois déterminants sociaux de la santé : l'accès aux services de santé, le soutien social et la capacité d'adaptation, et ce selon les dimensions psychologiques, économiques, sociocommunautaires et linguistiques.

Discussion: Les résultats proposent un modèle de programme d'intervention efficace pour enrichir l'intégration et la santé des immigrants dans les régions éloignées, tout en contribuant à orienter les politiques publiques et les initiatives communautaires visant à soutenir une immigration réussie, favorisant un enrichissement mutuel des nouveaux arrivants et des communautés d'accueil.

OC-1-5 <u>Les facteurs influençant la rétention des</u> <u>professionnels de la santé et les administrateurs de santé</u> dans le Nord Canada : une étude qualitative

Michael Louisme, University of Ottawa

Background/Purpose: L'accès aux soins de santé de qualité canadienne devrait être omniprésent sur son territoire, cependant, ceci diffère dans les régions nordiques en raison du manque de main-d'œuvre. En mettant particulièrement l'accent sur la ville d'Iqaluit, quels sont les motifs sous-jacents soit les barrières et les facilitateurs qui incitent certains professionnels de la santé à quitter ou à s'intégrer complètement dans ces communautés rurales.

Methods: Des entretiens semi-structurés seront effectués auprès de 5 différents groupes de professionnels de la santé. Divers thèmes clés seront abordés tels que les barrières et facilitateurs culturels, environnementaux, personnels, pratiques et financières qui influencent ou non la rétention dans le Nord. Une analyse sera faite avec NViVO.

Results: L'analyse de ces entretiens suggère que la rétention de ces individus étaient liés à leur grande volonté à créer des racines pour s'intégrer complètement dans le territoire. Cependant, ils existent de nombreuses barrières qui compliquent cette intégration notamment la barrière de la langue, l'isolement, le froid ardu du Nord, la présence de ressources limitées autant au niveau de services de base que les matériaux professionnels ou humains. Tout ceci est contrebalancé par un salaire plus élevé avec de nombreux avantages sociaux ; la tranquillité et l'esprit familial ainsi que les traditions uniques du Grand Nord

Discussion: Le Grand Nord présente diverses barrières qui coexistent avec des éléments facilitateurs uniques, cependant c'est la mentalité et volonté à s'intégrer qui semble principalement influencer la rétention ou non. Bref, ce projet attire l'attention sur les différentes barrières/facilitateurs qui influencent la rétention au Nord.

OC-2

Leadership - Black Health and Wellness

OC-2-1 <u>"It's not about 'count'</u>, it's about culture": The role of leaders in demystifying Education Scholarship

Kathryn Parker, University of Toronto

Background/Purpose: Medical education scholarship (ES) is critical to developing and evolving exceptional education programs for all medical learners and faculty. The Office of Education Scholarship (OES) at the University of Toronto was created in 2012 to address a precipitous decline in support and publication of family medicine scholarship. The OES aimed to support leadership that creates a culture of support, mentorship, and institutional commitment to grow engagement in ES activities. Following an early needs assessment in 2014, this study conducted a follow-up investigation into the skills and abilities of Family Medicine Academic Leaders in large academic teaching institutions and community-based teaching hospitals to create such an environment.

Methods: Semi-structured interviews with leaders (N=9) were conducted in 2021-2022 and analyzed using an inductive constant comparison approach to thematic analysis.

Results: Initial data (2014) showed leaders were unaware of the scope of ES, how to engage their faculty members, and described resistance to engaging in ES. In 2022, leaders in both academic and community sites could now describe their faculty's interest and current engagement in ES. They were actively seeking ways to build a culture of ES rather than resist it. Leaders continued to perceive ongoing challenges with infrastructure support that prevented their faculty from fully engaging in ES.

Discussion: Our findings indicated that successful leadership skills that promoted ES capacity building may be described as the 5 "C's": commitment, connectivity, context, community-building, and collaboration. Implications for how to support leaders and the development of these five skills will be discussed.

OC-2-2 What do Medical Education Staff Need for Talent Development: Results of a Staff-led Quality Improvement Inquiry of Medical Education Staff

Trevor Cuddy, University of Toronto

Background/Purpose: Medical education professional staff are important contributors to universities but are often invisible in institutional reports and strategic plans. Efforts to develop staff talent frequently rely on self-selection, are often generic, and developed without a deeper understanding of specific needs. This QI project was launched by medical education staff to understand staff career and talent development needs.

Methods: This study utilized qualitative and quantitative analysis techniques using an internally-developed anonymous survey deployed in March 2023. We invited 141 staff employed by Medical Education units within one institution to participate. Descriptive statistics were produced using SPSS and qualitative responses were analyzed using descriptive analysis (Braun and Clarke, 2012).

Results: The response rate was 66%. 'Stretch' opportunities (24%) and secondments (20%) were the favoured career and personal development interventions. Leadership training (24%) and project management training (24%) were the favoured professional skills opportunities. Project management tools (16%) were the highest ranked technology skills opportunity and small group sessions (20%) and having a mentor (18%) were the two highest ranked opportunities networking/mentoring. Staff development opportunities should be contextualized and integrated into the Medical Education environment, represent safe spaces for open discussion, and respectful of workloads.

Discussion: Staff show strong interest and desire for pursuing development opportunities. Study findings were immediately deployed in a new strategic plan that recognizes and highlights staff talent development. Institutions that want to recruit and retain professional staff may be interested in the findings of the study and could learn from the staff-led processes by which this was completed.

OC-2-3 <u>Championing change: How CPD leaders can</u> support a culture of wellness and equity

Sophie Soklaridis, Centre for Addiction and Mental Health; University of Toronto

Background/Purpose: Medical education professional staff are important contributors to universities but are often invisible in institutional reports and strategic plans. Efforts to develop staff talent frequently rely on self-selection, are often generic, and developed without a deeper understanding of specific needs. This QI project was launched by medical education staff to understand staff career and talent development needs.

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OC-2-4 <u>Promoting Leadership in health for African Nova</u> Scotians

Timi Idris, Dalhousie University

Background/Purpose: PLANS (Promoting Leadership in health for African Nova Scotians) is an initiative aimed at increasing the representation of African Nova Scotians in the health professions. The program achieves this through recruitment and retention efforts, community collaborations, and other partnerships to improve health outcomes within the African Nova Scotian community. PLANS provides programming, resources, and attends community and school events to support current postsecondary students, youth, community members, education and health organizations, teachers, student support workers, and guidance counsellors, postsecondary staff and faculty.

Methods: Over the past decade, PLANS has worked with the Faculties of Medicine, Health, and Dentistry at Dalhousie University to reduce barriers that African Nova Scotians face when pursuing post-secondary education. The program addresses racial inequity in healthcare, which is attributed to structural racism, by advocating for equitable admissions policies and developing innovative ways to increase interest in careers in health and medicine. In addition to recruitment efforts, PLANS focuses on retention by providing supports, mentorship, and networking opportunities to enable students to see themselves represented in the health system.

Results: PLANS has successfully addressed barriers faced by African Nova Scotian and other Black students on their journey to a career in health, and continues to adapt to the student needs.

Discussion: The program has supported countless students in pursuing their educational goals which results in a more diverse face of the healthcare system. This work will in turn improve health outcomes for the African Nova Scotian community.

OC-2-5 "It's Not About Power, It's Not About Control at All" - Indigenous Wisdom on Inclusive Governance in Higher Education: A Qualitative Study of Indigenous Elders' and Indigenous Scholars' Perspectives

Aleem Bharwani, University of Calgary

Background/Purpose: We are amidst a global resurgence of Indigenous ways set against a backdrop of pervasive structural discrimination and racism against Indigenous Peoples in higher education and academic medicine. We also recognize that millennia of Indigenous knowledge do not reside in the peer-reviewed literature but are held in oral traditions. This study sought to understand how Indigenous perspectives can create more inclusive structures of governance in academic medicine.

Methods: We conducted 10 one-hour semi-structured interviews with First Nations, Métis, and Inuit (FNMI) and global Indigenous Elders and scholars over Zoom between December 2022 and January 2023. Protocols were honored. We interpreted data using an inductive, thematic content analysis.

Results: Participants told us about barriers to inclusive governance (inhospitable current models, lack of trust, allencompassing Western worldviews, and only threads of historic knowledge); conceptualizations of inclusive governance (circles, consensus/participatory decisionmaking, diversity, revitalized and agile historic models, legitimacy of communities, relationality), inclusive governance values (7 generations, 7 sacred laws, living values is medicine, spiritual/God orientation), foundations of inclusive governance (culture of governed, multiple legitimacies, truth leads to reconciliation, resourcing); recommended governance structures (circles of circles, community representation, Elders at highest levels, open committee memberships, Indigenous self-determination), and recommended governance processes (conflict resolution models, generational planning, moral pacesetters, leadership development, and enshrined values).

Discussion: We believe these lessons are valuable to any academic Faculty or unit seeking to develop or reform its governance to be inclusive of Indigenous ways; and to any sector or discipline interested in inclusive governance reform.

OC-3

Wellness and the Culture of Medicine

OC-3-1 Exploring the Impact of Patient Complaints During Residency: A Qualitative Study

Elisabeth Normand, Canadian Medical Protective Association

Background/Purpose: Learners from marginalized backgrounds are disproportionally represented in experiences of discrimination. Equity Diversity and Inclusion (EDI) curriculum development studies show that simulation sessions, improve readiness to respond to discriminatory comments in the workplace. A workshop was developed to lay the foundation for an EDI training curriculum in residency programs. Purpose: To assess the understanding of EDI-related topics in Canadian Residency Training Programs and to determine the efficacy of videobased simulation in knowledge acquisition pertaining to EDI topics.

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Discussion: Implementing a workshop on microaggressions into curricula should be a fundamental part of residency training programs. By creating workshops, residents can feel empowered to identify and respond to microaggressions in the workplace. This can help create a training environment that supports diversity and inclusion, thereby contributing to wellness and work satisfaction.

OC-3-2 <u>Moral distress is an under-recognized challenge in</u> residency education: Findings from a scoping review

Allison Chrestensen, McGill University

Background/Purpose: Moral distress (MoD) "arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action." Research into the phenomenon originated in nursing and has since been documented in medicine. Still, little is understood about MoD in residents, who may be particularly susceptible due to their unique position in the medical hierarchy and consequent role tensions. Recent studies suggest a positive correlation between moral distress, burnout, and intention to leave the profession among trainees.

Methods: Arskey & O'Malley's scoping review framework, as well as recommendations from Levac and colleagues were used to examine the research question "What is the current state of knowledge regarding moral distress in medical residents?" The search of 4 databases (Medline, PsycINFO, Scopus, ERIC) yielded 2816 papers. Following screening and review, 39 papers were included in the data set, which was analyzed for trends and themes.

Results: The findings point to a lack of conceptual clarity surrounding MoD in residents, conflation with other ethical concepts, and a relatively small number of studies. Moral distress in residents was frequently related to a) the provision of futile care, b) perceived exclusion from decision-making, and c) disagreements regarding the course of care for patients.

Discussion: The findings illustrate the need for more conceptual rigor related to MoD in residency education. Educational programs and institutions may use the findings to raise awareness of common contributors and to guide future education and research.

OC-3-3 Wellness for All: Understanding the Needs of Basic Sciences and Research Faculty in Medicine

Anne Mahalik, Dalhousie University

Background/Purpose: Within Dalhousie University's Faculty of Medicine, basic sciences and research faculty contribute to medical advances and its global reputation as a research-focused medical school. These faculty are critical in teaching undergraduates and medical learners, as well as supervising and mentoring graduate students and postdoctoral fellows. They operate in a highly competitive global environment and continually compete for funding to maintain productive research programs, recruit high-quality students, and secure adequate resources for their labs. A recent international examination of academic and research culture found that issues related to work culture significantly impacted faculty wellness and put quality of research output at risk (Moran et al, 2020). The purpose of this study was to identify the wellness needs of basic science and research faculty using an empathy-based approach.

Methods: We employed a qualitative exploratory study to understand the wellness needs of basic sciences and research faculty. Empathy-based interviews were conducted with thirteen faculty, used to elicit stories about personal experiences and to uncover unacknowledged wellness needs.

Results: Participants identified various challenges, including access to resources; on-boarding of new faculty and mentoring throughout their careers; unrelenting pressure; and perception of value of their work.

Discussion: Basic Science faculty are at high risk for burnout due to the competitive nature of their work. This may be even more difficult depending on their local work environment. Use of an empathy-based approach engaged participants to identify their wellness needs, potentially reducing resistance to such interventions, decreasing risk of burnout, maintaining research productivity, and improving faculty retention.

OC-3-5 <u>Detaching, Struggling, and Embracing: Students'</u> Narratives of Death and Dying in Undergraduate Medical Education (UGME)

Victoria Luong, Dalhousie University

Background/Purpose: Medical students are taught to elicit patients' emotions related to end-of-life. However, they rarely have the opportunity to grapple with their own emotions, despite the potential impact these experiences can have on their learning and well-being. We therefore explored how students experience, and engage with, the inevitable emotions that accompany death and dying in medical school.

Methods: We conducted an ethnographic critical discourse analysis (CDA) focusing on discourses of death and dying during UGME. Data collection included observations (n = 68 hours) and document analysis (n = 149); however, here we focus on data derived from longitudinally interviewing 12 medical students twice per year for over three years (n = 66). Using CDA, we analysed transcripts for the discursive construction of event-stories, meaning narrative descriptions of emotions during clinical experiences related to death.

Results: We identified three prominent discourses: 1. Detaching, 2. Struggling, and 3. Embracing. Students' stories, and the language they used to tell them, demonstrated that emotional detachment remains desirable, but intense reactions to death cannot be avoided. Many stories illustrated how pain and sadness pair with peace and gratitude at the end of life, and how students find meaning in these encounters.

Discussion: While students felt compelled to detach from distressful emotions, death also served as a teacher, reminding students of what it means to be a doctor—and to be human. Medical education practices should be critically examined to reconsider student supports, and how discussions around emotions can extend beyond the emotions of patients.

OC-4

Teaching and Learning

OC-4-1. Adaptive Expertise in Medicine: Zooming in the Big Picture

Cindy Tran, McMaster University

Background/Purpose: The integration of adaptive expertise (AE), considered an advanced form of expertise, into CanMEDS2025 is underway, but there's a lack of clarity on its practical application. This study seeks to explore and identify specific instances of AE in the clinical context to better understand its real-world implementation and the necessary support structures required for education reform.

Methods: We generated data from semi-structured interviews using constructivist grounded theory and rich pictures to explore how expert emergency medicine physicians exhibit AE. Purposeful and theoretical sampling ensured diverse perspectives. We are aiming for 10 participants and based on preliminary participants, data is approaching saturation. We aim to develop a theoretical model through coding and comparative analysis to understand AE in the clinical setting.

Results: Expert physicians consider unique external contextual factors that cannot be controlled, such as weather or lack of resources (staff/other expertise, equipment, space, hospital area, time) to be novel circumstances. Their approach to challenges were framed by the surrounding contextual elements of the situation and eliminations of variables that would affect success. They emphasize the importance of a knowledge foundation and skillset, teamwork, seeking resources, and understanding how the environment in which they work optimally enhances their expertise.

Discussion: This framework highlights critical aspects of AE in the clinical setting. To effectively implement AE in the curriculum, we must address the importance of the context outside the individual. Rather than emphasizing the individual, AE research should be redirected towards an examination of the environment, healthcare system, and support structures in place.

OC-4-2 <u>Bridging the Gap Between Mental Health</u> <u>Professionals and Al Adoption Through Education</u>

David Wiljer, University Health Network

Background/Purpose: The mental health and addiction care field is interested in artificial intelligence (AI) but has expressed hesitancy to adopt it. As part of a larger study, this reflective learning journey aimed to provide mental health professionals with evidence-informed foundational knowledge and current applications of AI in mental health.

Methods: The Knowledge-To-Action framework shaped the larger study. This program was guided by the Health Equity and Inclusion framework. It ran consecutively over four (4) weeks. Each two-hour session consisted of didactic lectures, diverse guest speakers, pre-readings, and weekly reflection assignments. Certificates were awarded to participants who completed at least three (3) weekly reflection assignments. Data were collected through pre- and post-evaluation surveys, interviews and reflection assignments. First, a content analysis was completed followed by a depth analysis employing the REFLECT Rubric. Interviews were inductively coded and triangulated with data from the surveys and reflection assignments.

Results: 83% (n=30) successfully received a certificate. Learning from like-minded professionals enabled more meaningful conversations and tailoring content to align with participants' careers assisted in greater knowledge transfer. The reflection assignments allowed participants to internalize the content and enhance their knowledge and curiosity for more education. Preliminary results of the reflection analysis will be presented at the conference.

Discussion: Although AI education was enhanced and participants reported a positive overall experience, further education and support are necessary for clinicians to confidently implement AI into their workplace. An increase in reflective, continual learning programs may help bridge the gap between current mental health practices and the potential for AI-enhanced practices.

OC-4-3 Closing the Loop: Exploring the Dual Roles of Student Mentors in a Longitudinal Undergraduate Group Mentorship Program

Allison Odger, McGill University

Background/Purpose: Medical schools are increasingly incorporating mentorship as an educational strategy to support students as they become physicians. To our knowledge, no studies have focused exclusively on participants' simultaneous experiences as students and near-peer mentors. This study explores the experiences of student as mentors to better understand the ways in which they navigate their dual roles and how this navigation helps to shape future goals

Methods: Relying on interpretive description and the peer mentorship literature, this qualitative study utilized semi-structured interviews and audio-diaries with student mentors in McGill University's Physician Apprenticeship course. Twenty participants completed two interviews and two audio-diary recordings. Transcriptions and post-interview fieldnotes were thematically analyzed through a collaborative iterative-inductive approach and social constructivist lens.

Results: Participants viewed their dual roles as informing one another and three themes were identified. Participants' experiences as students shaped their desire to "give back" via mentorship. Participants' mentorship role supported their ability to see their progress, remembering what it was like to be a junior student, which was beneficial for developing and retaining their empathy. Their dual roles also worked to reaffirm or inspire their long-term aspirations and the kind of physicians and mentors they wanted to become.

Discussion: Simultaneously being a student and near-peer mentor provided a unique lens for students and enabled them to see themselves from multiple vantage points. Participants' dual roles worked to foster deep and meaningful reflection on their growth as medical students as well as the kind of physician they wanted to be in the future.

OC-4-4 "Putting up with shit" in the surgeons' lounge.

Jinelle Ramlackhansingh, Memorial University

Background/Purpose: Medical students voluntarily shadow physicians on clinical wards and in operating theatres. Students have the opportunity to view the daily work of physicians. Students can be exposed to physicians' professional and unprofessional behaviours towards their colleagues.

Methods: This research is part of a critical ethnography examining professional identity development of preclinical medical students at one Canadian University. A series of focus groups were carried out with the students. Interviews with faculty and administrative staff were completed. Participant observation of faculty governance meetings was done. Interview transcripts and field notes were analysed using a post-structuralist perspective.

Results: In focus groups, the female students spoke about witnessing a female surgeon "put up with a lot of shit" in the surgeons' lounge. The surgeon was subjected to implicit and explicit sexual harassment in the form of inappropriate comments and being assigned tasks deemed "female" in nature, such as answering the telephone. The female students reported that this situation had made them feel very uncomfortable.

Discussion: The culture of medicine historically views the surgeon as a "macho" man. The students' shadowing exposed them to gendered work experiences environments. Gendered healthcare work environments can discourage women from seeking surgical speciality training. Gendered assumptions and expectations, such as women being expected to answer the phone, create uncomfortable and potentially unsafe work environments. Senior leadership at Faculties of Medicine should consider establishing mentorship programs, like a Women in Surgery Interest Group, that can help support women considering surgical careers.

OC-4-5 <u>Developing Self-Regulated Learners: A Realist Review of Simulation-Based Training Approaches in the Professions</u>

Ryan Brydges, University of Toronto

Background/Purpose: Developing trainees' effective selfregulated learning (SRL) has become an explicit objective of many competency-based models. In health professions education, SRL interventions have been most studied in technology-enabled learning settings. Theories of SRL list up to 16 core processes underlying effective SRL, implying designs of SRL interventions. disparate heterogeneous findings of effectiveness. We asked: How do interventions designed using SRL principles in simulation-based settings influence outcomes, for whom, and under what circumstances? We aimed to develop a refined theory for designing customized interventions.

Methods: Using a realist review research methodology, we screened 12,868 papers mentioning SRL in professional training settings, assessed 668 full-text papers for rigour and relevance, and extracted data from 139 papers for analysis. We tested whether and how papers supported or challenged our four initial program theories for how and why SRL interventions would be implemented in simulation-based settings. We followed RAMESES guidelines throughout.

Results: Studies of healthcare professionals dominated other professions. Our findings indicate that most studies (47%) aligned with the "Assuming SRL" program theory, with a minority of studies aligning with the alternative "Supporting SRL", "Co-Regulating" and "Socially-Shared Learning" theories (19%, 24%, and 9%, respectively).

Discussion: When researchers assume SRL "will just happen" via a "general SRL capability", they tend to conduct justification studies that treat the multi-faceted potential of SRL superficially. Our findings encourage the design of SRL interventions focused on providing learners with tools that activate their use of high-yield SRL processes (e.g., goal-setting, monitoring, co-regulation, motivation) in collaboration with their peers and teachers.

OC-5

Faculty Development - Indigenous Health

OC-5-1 <u>A Novel Faculty Development Approach for</u> Community-Based Preceptors

Meera Anand, University of British Columbia

Background/Purpose: Traditional faculty development approaches often involve centrally located faculty leads developing programs that are disseminated to faculty. However, reaching and supporting community-based preceptors who are regionally dispersed and often disconnected from centrally located medical schools is a challenge. Community-based preceptors can feel more isolated and have their own contextual needs. Additionally, these community-based preceptors often have less access to a supportive network of peers and mentors for their teaching roles.

Methods: We employed a design thinking approach to the development of a longitudinal faculty development program for community-based preceptors (https://dayinthepreceptorlife.med.ubc.ca/). After a broad environmental scan and literature review, recurring "end user" interviews and focus groups enabled iterative design of a meaningful and relevant program. The final program design was multi-modal, entertaining, and underpinned by a social network learning framework to support these dispersed preceptors.

Results: In 2022-2023, a pilot of the program was completed with 2 communities. Participant feedback reinforced the value of peer connection coupled with integrating amusing learning elements. By the end of the program, numbers increased among participants now actively teaching learners. As well, participants indicated they were more socially connected to other preceptors in their ego networks.

Discussion: When developing a new faculty development program, early incorporation of end-user feedback can dramatically influence curriculum design. This is especially important for dispersed community-based preceptors who may have different needs than those that are more centrally voiced at the medical school. Faculty developers should also consider the role of facilitating peer connections in their curricular design.

OC-5-2 Accessibility: What does it mean to participants in Faculty Development Programs

Jana Lazor, University of Toronto

Background/Purpose: Faculty Development (FD) programs need to consider accessibility and use strategies that are accessible and adaptable to meet diverse needs, especially for distributed faculty. The literature does not delineate what is meant by "accessible" nor what are the fundamental components needed to integrate learnings into practice. BASICS is a longitudinal FD program for new teachers which was converted to synchronous virtual format, during COVID. The purpose of the study was to explore participants perception of components that enhanced or hindered accessibility to FD, specifically the virtual BASICS program for new teachers.

Methods: Interviews were conducted with BASICS participants. Research ethics approval was obtained. Interviews were recorded, transcribed, and analysed using NVivo. Constructivist Grounded Theory used to identify key concepts, themes, and relationships to accessibility.

Results: Participants described the program as partially accessible. Perceptions of accessibility varied based on their needs. Expected findings were related to time, location, and technical accessibility. Unexpected findings related to online cognitive engagement, application and integration of materials, as well as community connection. We proposed a stipulated definition and a related framework that describes an accessible FD program as one that is "capable of being reached, engaged with, understood, and applied by learners to influence teaching practice".

Discussion: Components that enhance or hinder accessibility to FD for teachers were identified. Given the unexpected findings, FD-related knowledge mobilization may benefit by being viewed through the multiple lens of accessibility (reached/physical, engaged with/social, understood/cognitive, applied) for teaching competence to be integrated at the patient, learner, & teacher interface.

OC-5-3 <u>Centre for Faculty Development Workshops for</u> <u>Psychiatry: Intention, Barriers, and Facilitators to Change</u> in Teaching and Learning

Shaheen Darani, University of Toronto

Background/Purpose: While studies show changes for faculty development initiatives (FD) designed to improve teaching effectiveness, few have explored the durability of changes. Assessing change and transfer to practice would improve our understanding of FD impact and identify which initiatives, and institutional supports are needed, for durable change. In November 2021, our University's Psychiatry Department partnered with Centre for Faculty Development, Faculty of Medicine, to offer six workshops tailored to Psychiatry teachers. The program's goal is to support residents and faculty interested in teaching and education. Purpose: to identify participants' intention to change after the workshop series, and barriers/facilitators to change.

Methods: Workshops were interactive and incorporated teaching/learning principles. Educational methods included experiential learning, role play, small group discussion. Psychiatry faculty served as cofacilitators for content relevance. We retrospectively surveyed participants three to six months post workshop on their perceived changes in knowledge and confidence in topics, perceived changes teaching practice. in facilitators//barriers of change. Surveys were disseminated via emails, responses collected on REDCap. Quantitative data were analyzed using descriptive statistics, qualitative responses using thematic analysis.

Results: Number of attendees varied (16 to 38) with survey response rates between 24% to 50%. Majority were clinical supervisors or education leaders. Significant increases in knowledge in topics and confidence were reported post workshop. Facilitators included resource provision, supportive colleagues, receptive learners, while lack of time to implement changes were barriers.

Discussion: Preliminary findings show improvements however, institutional support, including protected time, are needed for sustainability of changes. We anticipate these findings will inform future FD events.

OC-5-4 <u>Development of Family Medicine Faculty</u> Development Frameworks - A Tale of Two Countries

Sudha Koppula, University of Alberta

Background/Purpose: Family Medicine teachers in USA and Canada are valued. To describe family physician teaching activities, and provide support, faculty development frameworks were developed in both countries. These described family physicians' teaching activities and fostered teaching growth. Recognition of the need for such frameworks occurred at the Society of Teachers of Family Medicine (STFM, USA), and the College of Family Physicians of Canada (CFPC, Canada), but the process by which each was developed differed. The purpose is to describe the common need for Family Medicine faculty development frameworks in each country and differences by which each was created.

Methods: The CFPC struck the Working Group on Faculty Development in 2012. One of their mandates was to develop a description of family physicians' teaching activities. They created the Fundamental Teaching Activities (FTA) Framework. Recognizing a similar need in USA, family physicians at STFM began to create a framework in 2018 (Competency Framework for Medical Educators).

Results: In 2015, the FTA Framework was released in Canada, and in 2020, the Competency Framework for Medical Educators was presented in USA. Both provided Family Medicine faculty development guidance. Each were disseminated among Family Medicine audiences to demonstrate utility. CFPC and STFM gathered feedback.

Discussion: While the need to develop Family Medicine Faculty Development frameworks was common for the STFM and CFPC, the routes by which each framework was developed differed. Mutual input from the STFM and CFPC in the development of their respective frameworks was valuable to develop these products and fostered international collaborations in medical education.

OC-5-5 <u>Residency training programs to support residents</u> working in Indigenous communities. A multi-centre study.

Marghalara Rashid, University of Alberta

Background/Purpose: Background: To gain culturally appropriate awareness of Indigenous communities, research suggests that programs focus on sending more trainees to Indigenous communities. Working within this context provides experiences and knowledge that build upon classroom education and support trainees' acquisition of skills to engage in culturally safe healthcare provision. This study examines how residency training programs can optimize Indigenous health training and support residents in gaining the knowledge, skills, and experiences for working in Indigenous communities.

Methods: Methods: A qualitative approach, including Indigenous methodology guided by an Indigenous relational lens for collecting data and grounded theory for data interpretation was used. Theoretical sampling was used to recruit a total of 35 participants from three main study sites across two Canadian provinces. Data collection and analysis using grounded theory occurred cyclically to ensure appropriate depth of exploration.

Results: Results: Our data analysis revealed five themes: (1) Complexity of voluntourism as a Concept; (2) Diversity of knowledge representation for developing curriculum; (3) Effective model of care for Indigenous health; (4) Essential traits that residents should have for working in Indigenous communities; and (5) Build relationships and trust by engaging the community.

Discussion: Discussion: Indigenous Health is an underrepresented component within postgraduate medical education. Equipping trainees to provide holistic care and walk with Indigenous communities is essential, for both Indigenous Health as well as developing the next generation of clinicians and preceptors. We produce educational recommendations for residency programs to optimize Indigenous health educational experiences and provide residents with the skills to provide effective and safe care.

OC-6

Al and Data Science

OC-6-1 Application of the Knowledge-to-Action for Accelerating the Appropriate Adoption of Artificial Intelligence in Health Care: A Knowledge Mobilization Project

David Wiljer, University of Toronto

Background/Purpose: The integration of knowledge facilitates adaptability and readiness to harness the everadvancing and dynamic AI technologies. The seamless transition of knowledge is vital in the rapidly evolving healthcare landscape. The project underscores the importance of integrating different healthcare professionals' perspectives on evolving trends to transform patient care and health systems.

Methods: A descriptive analysis examined the feasibility of the Knowledge-To-Action (KTA) framework in accelerating the appropriate adoption of Al-enhanced care. The knowledge creation and action cycle informed the focus and continuous evaluation of the education interventions. Data collection methods included pre/post debriefs interviews and pre/post surveys.

Results: The multi-methods study produced significant outcomes across transforming mindset, skillset, and toolset. The knowledge creation phase involved 3 needs assessments with clinicians, AI instructors and patients, 2 national symposia, and 2 extensive scoping reviews. For the action cycle, 103 healthcare leaders and 158 clinicians underwent 4 certificate programs, further enhancing their competence in AI integration. The Innovation Hub mentorship program of 13 learners, 11 mentors, and an online community reaching 207 members to facilitate peer-to-peer knowledge transfer and application of AI skills.

Discussion: The KTA framework can be used to enhance AI education initiatives effectively. Informed by active engagement and insights from healthcare leaders, clinicians, and stakeholders, this approach ensures ongoing adaptation to meet the evolving needs for implementing AI-enabled care. It holds relevance for those aiming to harness AI's potential to improve patient care and healthcare systems. This commitment to continuous improvement is integral to advancing knowledge and practice in the field of medical education.

OC-6-2 <u>Developing Leaders to Accelerate the Appropriate</u>
Adoption of Artificial Intelligence in Health Care: Program
Evaluation

David Wiljer, University of Toronto

Background/Purpose: Artificial intelligence (AI) literacy gaps hinder the vital role of healthcare leaders in AI implementation. The AI for Healthcare Leaders certificate program aims to enhance AI understanding and management. This evaluation identifies equitable education approaches for seamless AI-enabled care integration by health system executives.

Methods: The qualitative study guided by the RE-AIM and Health Equity and Inclusion Frameworks investigated AI literacy in healthcare leaders. The program occurred over three cohorts in 2022-2023, featuring industry experts enriching the curriculum with dynamic discussions, collaborative activities, and real-world application reflections. Data included pre/post-surveys, interviews, and debriefs, analyzed deductively with triangulation. Descriptive statistics were derived from surveys.

Results: Across three cohorts, 103 participants, including healthcare administrators, researchers, providers, and patient partners, engaged in the program. Interviews were conducted with 18 participants (17.5%). Four themes emerged from leaders' perspectives: (1) knowledge mobilization and translation foster an organizational culture for change, (2) education focusing on critical reflection and supportive coaching for AI decision-making, (3) practical use cases increase participant understanding of AI applications, and (4) the importance of patient perspectives in AI-driven healthcare.

Discussion: In shaping Al integration, healthcare leaders in academic medicine are essential actors in bringing new innovations to healthcare. The program highlights the significance of building Al competencies for leaders as well as clinicians. Evaluation results stress the need for comprehensive Al education initiatives advancing the appropriate adoption of Al to effect appropriate change. This is pertinent to enhancing its implementation, thus potentially improving health systems and patient care.

OC-6-3 <u>Analysis of Narrative Feedback on Diagnostic</u> Radiology Resident EPAs Using Sentiment Analysis

Benjamin Kwan, Queen's University

Background/Purpose: To support the implementation of the CBME assessment framework, it is essential to gather both quantitative and qualitative data. While quantitative data is readily accessible and can be efficiently summarised, analysing qualitative data, particularly narrative feedback, poses difficulties due to its extensive volume and time-consuming review process. This study investigated the utilisation of natural language processing and machine learning techniques to streamline the analysis of narrative feedback, with the goal of reducing the burden of manual review and enhancing the efficiency of the assessment review process.

Methods: The study followed a six-phase methodology, including 1) data collection, 2) data labeling by subject matter experts, 3) data pre-processing, 4) model selection, 5) model development, and 6) model evaluation using metrics such as accuracy and F-1 score.

Results: A RoBERTA transformer model that had been pretrained on a general 3-label sentiment classification task (negative, neutral, positive) was selected as the base model. This model was further fine-tuned on resident feedback comments generated from 2020-2023 and additional synthetic data. The model was evaluated using a 5-fold cross-validation methodology achieving a mean weighted F-1 score of .91. The mean F1 score for the classifications were: negative .89, neutral .82, and positive .96. Initial findings indicate that the automation of narrative feedback with classification techniques is feasible.

Discussion: This pilot study explores an automated system to analyse narrative feedback for AA/CC usage. The modelling techniques employed in this study, can be extended to similar educational contexts, thereby contributing to the advancement of competency-based medical education practices.

OC-6-4 Examining the Efficacy of ChatGPT in Marking Short Answer Assessments in an Undergraduate Medical Program

Matthew Sibbald, McMaster University

Background/Purpose: Traditional approaches to marking short answer questions face limitations in timeliness, scalability, inter-rater reliability, and faculty time costs. Harnessing generative artificial intelligence to address some of these shortcomings is attractive. This study aims to validate the use of ChatGPT for evaluating short answer assessments in an undergraduate medical program.

Methods: Ten questions from the pre-clerkship medical curriculum were randomly chosen; six previously-marked student answers, classified into novice, proficient, and accomplished categories, were selected for each question. The 60 answers were evaluated by ChatGPT under four conditions: with both a rubric and standard, only a standard, only a rubric, and neither. Various statistical tests, including repeated measures ANOVA, were employed to compare ChatGPT's scoring to that of an expert human assessor.

Results: ChatGPT displayed good Spearman correlations with a single human assessor (r=0.6-0.7, p<0.001) across all formats, with absence of a standard or rubric yielding the best correlation. Recategorization was common (65-80%), but score adjustments of more than one point were less frequent (20-47%). Notably, the absence of a rubric resulted in systematically higher scores (p<0.001, partial $\eta^2=0.33$).

Discussion: Our findings demonstrate that ChatGPT is a scalable and efficient alternative to human assessment, performing comparably to a single expert assessor. This is particularly relevant for medical education administrators looking for reliable, cost-effective grading solutions. This study serves as a foundation for future research in Albased assessment techniques, suggesting potential for further optimization and increased reliability.

OC-6-5 <u>Integration of AI in curricular mapping and</u> analysis: A proof of concept study

Kate Allen, McGill University

Background/Purpose: Analyses of curricular data for undergraduate medical programs is challenging due to large data sets and the specialized knowledge required for analyzing and interpreting outputs. Curricular mapping techniques often address these challenges but can remain tedious or even manual processes when analyses are complex or specialized. The potential affordances and constraints for integrating Artificial Intelligence (AI) technology into curricular mapping and analyses software is explored in this proof of concept study.

Methods: Curricular mapping software (CBlue) was analyzed by a team of curriculum specialists and curriculum managers to identify areas where analyses were time consuming or tedious. Collaborating with the software developer, we identified opportunities where AI technologies could enhance these analyses.

Results: The integration of AI into curriculum mapping software was technically feasible. We developed a novel retrieval-augmented framework that converts curricular data into neural embeddings that are integrated with a large language model using sequence-to-sequence transformer techniques during inference. AI informed analysis of internal curriculum data enabled high-level comparisons and intuitive searches of the curriculum that were not possible through simple key-word searches. Similarly, the technology could be trained to produce appropriate suggestions for future tagging of content based on the current content patterns within the system.

Discussion: Al technologies can offer effective support and added power to curriculum mapping tools. Affordances include increasingly complex and specialized analyses of curriculum data. Constraints include the time investments for maintaining a 'human-in-the-loop' to carefully review outputs and ensure interpretability of results.

OC-7

Curriculum

OC-7-1 Spiral Integrated Design in "Concussion"

Competency Acquisition: Resident Perspective on

Challenges

Alice Kam, University of Toronto

Background/Purpose: Once upon a time researchers believed that Spiral Integrated Design which unifies all evidence-based teaching techniques into one unit with the Utilization-Focused Evaluation framework yields the most efficient learning outcome in Peer Teachers. Peer teachers in a Spiral Design with all pre-disposing factors, enablers and reinforcers of adaptive expertise development are ideal for learning a complex topic, like concussion. This ideal curriculum consists of academic half-days(AHDs) and clinics for Year 1 and 2 family medicine residents at The University of Toronto initial evaluation demonstrated knowledge improvements and effective behavioral changes; however, we thought about a multi-level perspective of competency acquisition. Thus, we aimed to explore resident perceptions of concussion learning challenges.

Methods: So, what we did was a descriptive cohort study to explore resident perceptions of concussion learning challenges. Constructivism framework was applied for deductive conceptual analysis. In the first iteration, we used multiple-choice knowledge surveys to support reflective learning pre-AHD and six-months-post-AHD. In the second iteration, case scenarios were utilized.

Results: And, we have discovered that residents' (n=14) perceptions of their roles influenced their learning organization and approaches. Challenges were related to knowledge gaps in both declarative knowledge and knowledge interconnections. Through reflection, residents identified their learning gaps, leading to transformative learning.

Discussion: And this can change the way we use this design for system analysis. Resident mindsets and factors that hindered "concussion" learning may unintentionally have negative impacts on the continuity of patient care. Future studies could explore how to leverage humanistic adaptive expertise, and cross-disciplines for curriculum development and evaluation to promote an integrated education experience.

OC-7-2 The Development of Transgender Health Objectives of Training for Canadian Endocrinology and Metabolism Residency Programs - A Modified Delphi Study

Catherine Yu, University of Toronto

Background/Purpose: The inaction of post-graduate medical education to invest in standardization of transgender health training has been recognized as a concern by both physicians and members of the transgender community. Closing this education gap and improving transgender healthcare access necessitates the development of consensus-built transgender health objectives of training (THOT), particularly in Endocrinology and Metabolism Residency programs.

Methods: We conducted a two-round modified Delphi process with a national panel of experts (n= 20) to identify THOT for curricular integration. Participants used a 5-point Likert scale to assess the relative importance of THOT, with opportunities to provide written feedback throughout. Data was collected through Qualtrics and analyzed after each round.

Results: In the first Delphi round, panelists reviewed 81 literature-extracted THOT and produced consensus on all objectives. Based on panelists' comments, 5 THOT were added, 9 were removed, 34 were combined into 12 objectives, and 47 were either reworded or remained the same, such that, in the second Delphi round, panelists assessed 55 THOT. After the second Delphi round, consensus was reached for 8 THOT. Post-Delphi feedback from program directors led to further combination of objectives to arrive at a final set of 4 THOT for curricular inclusion.

Discussion: To our knowledge, this is the first time an evidence- and consensus-based approach has been used to establish THOT for any postgraduate medicine subspecialty program across Canada or the United States. Our results lay the foundation towards health equity and social justice for transgender health medical education, offering a templated process for future innovation.

OC-7-3 At Its Core: The Foundational Role of Anatomy in Surgical Communication, Decision-Making, and Practice

Lucas Streith, University of British Columbia

Background/Purpose: Anatomy is central to surgical practice and thus vital to surgical education. However, the role of anatomy in surgical decision-making, communication, and practice more broadly has not been directly explored. Understanding this relationship may facilitate more effective resident education and accelerate expertise development.

Methods: We conducted an exploratory constructivist qualitative study to identify where and how anatomy is used during acute care surgery handover at a tertiary care referral hospital in Canada. Participants included general surgery trainees and attending surgeons. Handover rounds were observed, audio recorded, and transcribed. Using reflexive thematic analysis, transcripts were coded inductively and arranged into themes.

Results: Eleven handover rounds attended by eighteen trainees and thirteen surgeons were included. Four main themes were developed: (1) The richness of anatomy knowledge in surgery (beyond location and function), (2) Surgical interpretation of anatomy as an integrative process, (3) Anatomy as a surgical communication tool, and (4) Anatomy as a boundary of surgical expertise. These themes highlight the role of anatomy in surgical decision-making, communication, teaching, and the sociocultural practice environment.

Discussion: Anatomy plays a more foundational role in surgical cognition than previously described, going beyond basic science knowledge to shape many aspects of surgical practice. Surgeons do not just know anatomy, they practice anatomically. These results emphasize the importance of educators explicitly discussing anatomy-based practice with trainees, and for trainees to learn anatomic principles within – and not separate from – surgical processes. Doing so may foster situated anatomy understanding that is suited for real-life surgical practice.

OC-7-4 <u>Traditionalist</u>, <u>Supplementer</u>, <u>or Reformer?</u> <u>Interviewing Canadian Medical Students on their</u> Approach to Studying using Non-Official Resources

Donovan Makus, University of Ottawa

Background/Purpose: Medical students have many non-traditional resources available, some student-developed and others commercial-off-the-shelf learning platforms developed for medical education (MedED-COTS). It is unclear how, when, and why medical students use these resources, and if this usage supplements or replaces the traditional curriculum. The purpose of this project was to explore the use of non-traditional resources from a student perspective in pre-clerkship and clerkship.

Methods: Second and third year University of Ottawa medical students were interviewed to explore traditional and non-traditional resource utilization, rationale, and satisfaction. Interviews were recorded and transcribed verbatim. Thematic analysis guided by self-regulated learning theory was completed in iterative meetings. Three co-authors independently reviewed transcripts then over several team meetings developed codes, followed by candidate and final themes.

Results: 29 students (18 pre-clerkship;11 clerkship) were interviewed, mean time=34 minutes (range: 18-65 minutes). Four main themes were identified; 1. The Traditional Curriculum Lacks Efficiency and Change is Desired 2. Students Select Non-Traditional Resources that were more efficient, higher quality, and recommended by peers 3. Utilization archetypes were identified; Traditionalists who attend lectures and used minimal nontraditional resources. Supplementers who attend some lectures and use non-traditional resources alongside the curriculum and Reformers who rarely attend lectures and rely heavily on non-traditional resources and 4. Studying for Yourself Now or Your Patients Tomorrow which describes how students prioritize their studying goals. In conclusion, non-traditional resources have become an important part of the curriculum. Faculty should explore the potential use of readily available materials to adapt the curriculum to meet student needs.

Discussion: In conclusion, non-traditional resources have become an important part of the curriculum. Faculty should explore the potential use of readily available materials to adapt the curriculum to better meet student needs.

OC-7-5 <u>Connection is Key: Longitudinal Academic</u> Mentorship in Medical Education

Joanne Rodger, University of Alberta

Background/Purpose: This presentation introduces a longitudinal, mandatory academic mentorship program for medical students and describes how this program builds connections between faculty members and students in order to facilitate discussions and advice about students' academic achievement through the lens of a practicing physician.

Methods: Program evaluation data, including surveys of students and feedback from mentors are used to investigate the strengths, weaknesses, and areas of growth for this academic mentorship program. This qualitative study analyzed narrative comments, identifying common themes and trends within and across the data.

Results: Evaluation data indicate that the mentorship program achieves one of its stated objectives of ensuring that each medical student is connected to at least one faculty member from the beginning of medical school. Students report feeling supported and receiving personalized feedback from their mentors. Faculty members who serve as mentors suggest that the compulsory nature of the program is critical, but express concern about their own capabilities as mentors.

Discussion: While this program is successfully meeting its goal of connecting students to academic faculty members, the mandatory nature of the program, variations in how mentors approach the meetings, and the singular focus on academics may not be meeting the needs of some students. When implementing a new academic mentorship program, medical schools should consider being more deliberate in how mentors and mentees are paired; ensure training for mentors includes more information about the curriculum and assessment practices.

Block D

OD-1

Assessment

OD-1-1 Exploring the Landscape of Verbal Feedback in the Operating Room: Quantity, Quality, and Residents' Perceptions in Competency-Based Medical Education

Ingrid de Vries, Queen's University

Background/Purpose: Verbal feedback is critical for residents' progression through Competency-Based Medical Education (CBME) training [1,2,3]. It is unknown how often, what type and what quality of feedback residents receive in the operating room (OR). We investigated the quantity, quality, and perceived usefulness of verbal feedback that faculty provided to surgery and anesthesia residents in the OR.

Methods: Using a convergent parallel mixed-methods design, we audio-recorded conversations between faculty-resident dyads during clinical encounters in an academic hospital OR. We collected EPA assessments corresponding to the encounters and residents' perceptions of the usefulness of the verbal feedback they received. Recordings were transcribed and coded a priori by two independent researchers, based on the Feedback Quality Instrument domains (FQI) [4]. We correlated residents' perceptions of the feedback received to FQI domains.

Results: We collected recordings of verbal feedback for 53 faculty-resident dyads , resulting in 125 hours of audiotape. Feedback focused most frequently on analyzing performance (61%), fostering learner agency (19%) and fostering psychological safety (9%). The usefulness of verbal feedback was rated as extremely useful (n= 4, 15%), very useful (n=15, 55%), moderately useful (n=7, 26%), slightly useful (n=1, 4%). Residents (n=17, 63%) had an opportunity to discuss the feedback with faculty. We found that feedback that covered fewer FQI domains was perceived to be less useful. Feedback with focus on fostering psychological safety and learner agency was perceived to be more useful.

Discussion: These results will improve our understanding of the quality of verbal feedback provided to residents in the OR.

OD-1-2 All vs. some: impact of key feature scoring on multiple response questions

Debra Pugh, University of Ottawa

Background/Purpose: The key features (KFs) approach to assessment is used extensively in the assessment of clinical decision-making skills, including for high-stakes licensing examinations. In theory, the KF approach is thought to provide better discrimination by targeting areas of importance or challenge for a learner; however, it is based on the inherently subjective judgment of subject matter experts (i.e., subject matter experts are asked to identify the most important steps in the resolution of a problem). However, there may not be a strong rationale for why examinees receive no credit for selecting objectively correct options simply because they do not reflect the KF. This study aims to investigate if scoring all correct responses instead of only the KF correct answer(s) will improve items' psychometric properties.

Methods: Data from the MCCQE Part I was used in this study. The questions of interest are 152 short menu items from a 2021 examination administration. Statistical analyses were performed to compare the performance between the two types of correct answers (KF and non-scored).

Results: Items without a correct non-scored response have fewer flags for item review than items with a correct non-scored response. In about 25% of the items, candidates selected correct non-scored responses more frequently than KF-correct responses.

Discussion: From a psychometric perspective, discarding data related to the non-scored responses may be unjustifiable as it could contribute to measuring examinees' ability and aid the precision of exam scores.

OD-1-3 <u>The interplay between assessment and clinical</u> reasoning: A qualitative descriptive study

Meredith Young, McGill University

Background/Purpose: Clinical reasoning is a cornerstone of effective clinical practice, and as such an important focus of teaching and assessment practices. While assessment is typically used to capture levels of performance, a growing body of literature suggests assessment can also serve as an educational intervention – shaping, supporting and encouraging (or discouraging) learning. We explored learner views of how different assessment approaches may influence future clinical reasoning performance.

Methods: Using a qualitative descriptive approach and semi-structured interview (approx. 60 minutes in length) conducted via videoconferencing software, we interviewed 10 clerkship-level medical students at one Canadian university. We gathered participant experiences and perceptions of the relationship between clinical reasoning and its assessment

Results: Participants acknowledged the importance of assessing clinical reasoning, but they suggested that assessments tend to necessitate a 'right' way to reason through a problem in order to be successful. More specifically, we identified four preliminary themes: (a) the need for students to build the 'right' clinical reasoning framework or approach to be displayed in performance and testing in order to pass and/or be perceived as competent, (b) how assessing clinical reasoning has many associated challenges, (c) how clinical reasoning is different when in assessment contexts versus not and (d) the recognition that testing results can be poor indicators of reasoning aptitude, and assessment results are influenced by a number of factors.

Discussion: Disentangling the intended and unintended educational impact of assessments will contribute to more intentionally designed assessment programs to support the development of clinical reasoning.

OD-1-4 Examining differences in feedback focus between learner-entered and preceptor-entered workplace-based assessments

Ann Lee, University of Alberta

Background/Purpose: Decades of research have established that while there is a connection between feedback and learning, the degree to which feedback helps learners improve varies greatly. This variance can be due to factors including differences in how feedback is shared and interpreted. We explore these differences by examining learner-entered and preceptor-entered FieldNotes. Each FieldNote includes a narrative summary of a feedback conversation. Exploring feedback documented by residents compared to feedback written by preceptors may grant insights into what each population considers to be important and worthy of documentation.

Methods: We performed secondary data analysis of deidentified FieldNotes completed by both preceptors and learners between 2015-2018 at two teaching sites (N=4206). We coded the narrative feedback using Hattie and Timperly's four levels of feedback (2007): Self, Task, Process, and Self-Regulation. We used independent-samples proportions to look for population differences in feedback levels.

Results: Compared to preceptor-entered FieldNotes, learner-entered FieldNotes had higher proportions coded with Self level (0.088 vs 0.025), z=8.29, p<0.001 and Self-Regulation level (0.056 vs 0.031), z=3.31, p=0.001. Preceptor-entered FieldNotes had higher proportions coded with Process level (0.421 vs 0.342) z=-3.85, p<0.001 and Task level (0.802 vs 0.758), z=-2.6, p=0.001.

Discussion: Our findings suggest there are differences in what preceptors and residents focus on when documenting feedback. These differences may have an impact on how useful feedback may be to individual learners.

OD-1-5 <u>Introducing Entrustable Professional Activities in</u> <u>Clerkship: Best Practices, Challenges, and Increasing their</u> Utility to Clerks

Samantha Inwood, University of Toronto

Background/Purpose: The University of Toronto piloted the introduction of the AFMC pan-Canadian Entrustable Professional Activities (EPAs) to 3rd year clerks in 2023. To prepare for full implementation in 2023-24, we conducted a utilization-focused evaluation investigating the usability of the EPA submission platform, feasibility of completing EPAs in clerkship, and utility of EPAs to clerks.

Methods: We conducted faculty interviews (n=10) and a clerk focus group (n=8), followed by 6 surveys distributed to independent samples of clerks over four months (n=61, 23% response rate). Surveys captured information around themes identified in the focus group and interviews, as well as other details relevant to EPA usability, feasibility, and utility. Analysis included thematic coding of qualitative data and descriptive analyses of quantitative data.

Results: Analysis of focus group and faculty interview data identified best practices, challenges, and suggested changes to completing EPAs. Most survey respondents indicated they had difficulty using the EPA submission platform, though this decreased slightly over time. Administrative burden (for both clerks and assessors) and specific clinical settings were also described by clerks as barriers to completing EPAs. Most survey respondents did not yet find EPAs facilitated opportunities for feedback, and responses were mixed as to whether EPAs felt 'low stakes'. Learner feedback also emphasized reducing redundancy across assessments, and the high value clerks place on verbal feedback from their teachers.

Discussion: Findings from evaluating the pilot allowed us to refine the EPA form and informed both faculty development and program-wide communications about EPAs in preparation for full implementation and evaluation in 2023-24.

OD-2

Equity, Diversity and Inclusion

OD-2-1 STAND and SHIELD: Empowering Mentors and Mentees through Guiding Frameworks

Catherine Yu, University of Toronto

Background/Purpose: Adverse incidents surrounding microaggressions happen at unacceptably high rates in health care, creating a substandard environment for learners and clinicians alike. It has been unclear how an individual who has faced a microaggression may want support following an incident. With increased experiences of microaggressions with no debrief, burnout and decreased academic attention are common consequences observed in learners and clinicians.

Methods: Following Kern's approach in curriculum development, a literature review was conducted (problem identification). Faculty survey and interview data (needs assessment) and input from an expert mentorship panel of 8 faculty members (goals and objectives) were used to select an educational strategy. Based on this, an evidence-based infographic to guide mentors in supporting mentees experiencing microaggressions was created.

Results: Eleven peer-reviewed articles were reviewed, from which strategies were extracted and synthesized into two frameworks. The STAND framework was developed to guide mentors on being allies to mentees who may experience differential treatment due to being a member of a minority group. The SHIELD framework provides an approach to mentors to support mentees who have experienced microaggressions. The STAND and SHIELD frameworks were disseminated via rounds, departmental website and blog, and word of mouth.

Discussion: The STAND and SHIELD frameworks were developed to meet the needs of the diverse faculty within the Department of Medicine, University of Toronto. By bringing attention to and providing tools to address microaggressions, in combination with other interventions, these tools may reduce burnout, improve wellness, and promote a culture of inclusion.

OD-2-2 <u>Mentoring for admission and retention of Black</u> socio-ethnic minorities in medicine: a scoping review

Julia Kemzang, University of Ottawa

Background/Purpose: Despite numerous mentoring strategies to promote academic success and eligibility in medicine, Black students remain disproportionately underrepresented in medical school. This scoping review aims to identify the mentoring practices available to Black medical education students, specifically the mentoring strategies used, their application, and their evaluation.

Methods: This work was conducted in accordance with PRISMA guidelines. Primary sources searched included MEDLINE, EMBASE, CINAHL, PsycINFO, Eric, and Education Source. All studies conducted with applicants, medical students, and black residents were included. All research designs detailing the implementation of various mentoring strategies for these students were considered. Articles were processed and evaluated using the COVIDENCE tool by two pairs of reviewers and then synthesized in a narrative fashion.

Results: Our search generated a total of 14 articles. Our findings report that mentoring practices for Black students include peer mentoring, dyad mentoring, and group mentoring. Mentoring is typically offered through discussion groups, educational internships, and didactic activities. According to these articles, evaluation of a mentoring program takes into account (1) pass rates on medical exams (e.g., MCAT, Casper), (2) receipt of an invitation to a medical school admissions interview, (3) successful match to a competitive residency program, and (4) a mentee's report of the overall experience and effectiveness of the program.

Discussion: This project describes the current state of knowledge about mentoring black students in medical education. This will allow for tailored strategies to increase the representation and success of black students in medical school.

OD-2-3 <u>Mentoring Matters: Evaluating The Black</u> Physicians of Canada Mentorship Program Experience

Chikaodili Obetta, University of Toronto

Background/Purpose: There has been a steady increase in Black Canadian medical residents; however, there are significant barriers to effective mentorship. The Black Physicians of Canada (BPC) established the first nationwide race-concordant, formal mentorship program to support Black physicians. This study aims to describe and understand the experiences of mentors and mentees in the BPC mentorship program, including associated facilitators and barriers to mentorship.

Methods: Mentors and mentees from the inaugural cohort were eligible to participate. In-depth interviews were conducted with participants via Zoom. Interviews were recorded and transcribed. Data from the interviews were coded and analyzed with Nvivo12 by two independent reviewers, using reflective and inductive thematic analysis methods.

Results: Thirteen program participants, seven mentors and six mentees, were interviewed. Among the participants, 69.2% self-identified as female, 76.9% practised as specialists, and 38.5% practiced in Ontario. Five key themes were identified: Program Experience, Program Administration, Mentorship Characteristics, Black Physician Experiences in Medicine, Recommendations for Improvement. The BPC mentorship program was valued for its role in enhancing mentorship accessibility and fostering a sense of community. Participants appreciated BPC's proactive support and personalized dyad pairing. Participants reported increased self-perceived competency for residency success and overcoming imposter syndrome. Shared racial identity and lived experiences were reported as essential mentor attributes.

Discussion: Our findings highlight the importance of the BPC mentorship program in supporting the growing number of Black physicians. Access to mentors sharing similar racial backgrounds provides unique guidance in career development and mitigating discrimination. The incorporation of structured training and events may enhance the mentorship experience.

OD-2-4 It's just not the purpose of medical school": Dissecting the invisible forces of faculty resistance to social justice education amidst curriculum renewal

Allison Brown, University of Calgary

Background/Purpose: Integrating social justice teachings within medical education is pivotal for cultivating future doctors who are attuned to societal inequities and health disparities. As the Cumming School of Medicine embarked on pre-clerkship curriculum reform, pronounced resistance from faculty became evident early on, posing a considerable challenge to the envisioned educational transformation. Understanding the roots of such resistance is vital to optimize teaching efforts and prepare future doctors to address social inequities and health disparities more effectively.

Methods: Using an institutional ethnography (IE) approach, we aimed to uncover the routine practices and norms of faculty and critically assess the systemic societal, institutional, and professional forces driving this resistance. In-depth immersion concurrent with the curriculum renewal generated real-time empirical data through naturalistic observations from fieldwork as well as semi-structured interviews and text analyses.

Results: Our findings unveiled "ruling relations" fuelling faculty resistance, ranging from broader organizational influences (e.g., MCC objectives) to professional identities, to institutional practices (e.g., University policies) and program-level intricacies. Resistance, while often surfacing in interpersonal exchanges, extends beyond the lack of individual awareness of social issues. Rather, it is a complex phenomenon intricately tied to historical physician training, medicine's ethos, and longstanding institutional processes and practices.

Discussion: This study sheds light on the multifaceted nature of faculty resistance and the invisible yet powerful forces shaping it. By unveiling these dynamics, we offer insights for institutions to navigate and mitigate similar forms of resistance, fostering curricula that better prepare physicians to care for diverse populations and address health disparities and inequities.

OD-2-5 <u>Preliminary Evaluation of the Inspiring Leadership</u> in Equity, Accessibility and Diversity (iLEAD) Mentorship Program

Sebat Mohamed, University of Toronto

Background/Purpose: Our experiences in medical education are shaped by our social and financial capital, leading to a disparity in access to opportunities among Underrepresented Minorities in Medicine (URMMs). This disparity is not well-studied in research. iLEAD, the first program of its kind at the University of Toronto, connects triads of residents and first- and second-year medical students. This program aims to address inequities in medical education and provide mentees with support in career exploration and the Canadian Resident Matching Service (CaRMS)

Methods: The pilot program includes 24 residents, 32 second-year and 41 first-year medical students. To inform how iLEAD has impacted medical students, we conducted pre-program and post-program surveys to understand residency preparedness

Results: A pre-program evaluation was completed by 88.7% (n=63) of medical student participants (25 second-year and 38 first-year). When asked about CaRMS, 43.7% (n=31) reported they are not familiar; 73.2% (n=52) reported they do not feel confident; 78.9% (n=56) are not aware of application logistics; 80.3% (n=57) do not feel prepared to participate. 73.2% (n=52) of participants feel anxious about residency and CaRMS. Post-program evaluation results will be analysed by ICAM 2024

Discussion: URMMs may experience barriers in navigating medical education that result from a lack of representation, connections to practising physicians, and knowledge about CaRMS. These barriers may contribute to the experiences that URMMs have during and after medical school. Future studies should compare experiences of URMMs to their counterparts to inform equitable interventions

OD-3

Teaching and Learning

OD-3-1 <u>Learning the "alphabet soup" of undergraduate</u> <u>medical education</u>

Jinelle Ramlackhansingh, Memorial University

Background/Purpose: Medical students are expected to use and learn medical language as part of their socialization into medical practice. Learning the medical language has been reported to be "critical" for students' symbolic participation and identification with the medical profession.

Methods: This research is part of a critical ethnography examining professional identity development of preclinical medical students at one Canadian University. Regular focus groups were carried out with the students. Interviews with faculty and administrative staff were completed. Participant observation of faculty governance meetings was done. The theories of Bourdieu and Foucault were used in data analysis.

Results: The students spoke about their experiences using medical terms. Mila, Audrey and Isla reflected on their difficulty pronouncing medical terms. They practice saying and spelling words like hematochezia and odynophagia. The researcher also got confused when the students discussed having to do their FWPE and SWPE. The students explained this was their formative and summative witnessed physical examinations in clinical skills.

Discussion: The students became adept at using an "alphabet soup" of medical terms to create an aura of clinical efficiency and professionalism. The students were learning to embody their new professional identity as they began speaking as a medical professional. Bourdieu regards language as "an instrument of power and action." Having the cultural capital of being able to easily "talk the talk" promotes inequity in medical education. Medical students who have cultural capital through work experience, prior scientific education, or even family background may be able to assimilate into the new medical language effortlessly.

OD-3-2 <u>L'accompagnement de l'étudiant en soins</u> infirmiers dans la mobilisation de sa compétence du raisonnement clinique en stage : analyse ergologique

Geoffroy Néel, Université de Haute-Alsace (UHA)

Background/Purpose: Le cadre de santé formateur accompagne l'étudiant dans le raisonnement clinique autour d'une démarche clinique, cependant il n'évalue plus les activités sur le terrain. Ce sont les infirmiers qui évaluent cette compétence de raisonnement en action (Coudray & Gay, 2009). Un objet de recherche émerge en sciences de l'éducation et de la formation (S.E.F.), en lien avec les sciences infirmières (S.I.) : comment ces professionnels accompagnent réellement les apprenants dans la mobilisation de cette compétence ? L'ergologie pourrait y répondre : démarche scientifique d'analyse de l'activité, peu utilisée. Elle pose des questions épistémologiques et met en lumière des nouveaux savoirs issus de l'activité (Di Ruzza & Schwartz, 2021), donc des pratiques soignantes.

Methods: Elles mobiliseront les concepts/auteurs suivants: raisonnement clinique (Formarier & Jovic, 2009) (Lavoie & all, 2021) (Lavoie & all, 2017) (Psiuk, 2013), accompagnement en stage (Hesbeen, 2020) (Paul, 2012), ergologie (Dujarrier & all, 2016) (Sperandio & Drouin, 2017). L'enquête par entretiens sera réalisée auprès d'infirmiers dans différents services hospitaliers, en s'écartant de la doxa (Bourdieu, 2003). Quatre instruments seront utilisés pour réaliser un diagnostic de leur activité, dont: - Le dispositif dynamique à trois pôles propre à l'ergologie, - L'entretien d'explicitation (Vermersch, 2009), L'analyse sera effectuée, en partie, par le logiciel NVivo.

Results: Ils seront connus après l'enquête (2024).

Discussion: Des nouveaux savoirs (renormalisés) émergeront. Faire converser les S.E.F., avec les S.I. et l'ergologie provoquera un arc herméneutique (Weisser, 2005) : recherche pluridisciplinaire intégrative et novatrice

OD-3-3 A Remedy for Epistemic Injustice: Using a Resident-Led Faculty Development Workshop to Explore Trainee-Consultant Expertise Role-Reversal

Beatrice Preti, Western University

Background/Purpose: Medical education traditionally involves directional flow of knowledge/skills/attitudes from a senior to junior individual. However, medical training also provides abundant opportunities for expertise role-reversal, where the (ideal) direction of flow is reversed. Formally recognising expertise role-reversal, as is done in fields such as aviation, appears novel in medical education; however, lack of acknowledgement/recognition or poor management can induce distress (epistemic injustice). We therefore sought a better understanding of expertise role-reversal's perception in medical education.

Methods: A resident conducted a feedback-writing workshop for her own consultants, eight of whom underwent semi-structured interviews, analysed in the Stenfors-Hayes phenomenographical approach. An autoethnographic analysis was also conducted by the trainee.

Results: The workshop was positively received and seen as effective. A simultaneous multiplicity of experiential perspectives was identified by both the consultants and trainee. Reflections included openness to expertise role-reversal when benefit was seen, insight into trainee-consultant power dynamics, maintenance of traditional hierarchy, and recognition that consultants adapted more readily to the learner role than the learner did to the teacher role.

Discussion: Consultants were able to adopt a learning mindset while simultaneously situating themselves in the existing hierarchical relationship to the trainee-presenter. This suggests that deliberately viewing moments where a trainee presents information unknown to the consultant may serve as a starting point for more equitable exchange of knowledge between both parties in the clinical routine, and a remedy for epistemic injustice. It is hoped that normalization and further articulation/understanding of expertise role-reversal will lead to an improvement in educational culture and, ultimately, patient care.

OD-3-4 <u>Caring for the whole child: Complex Adaptive</u>
Systems in Pediatric Practice

Linda Peritz, University of British Columbia

Background/Purpose: The medical literature has embraced the theory of complex adaptive systems, however, we still know little about how physicians use this theory in their practice, limiting our ability to integrate it into medical education. To address this gap, we explored how a group of pediatricians understand their care for children with complex, chronic illnesses as a complex adaptive practice.

Methods: Using an exploratory descriptive qualitative approach, we interviewed 10 pediatricians who practice in British Columbia, asking each to describe two experiences: one of a child with complex needs who received excellent care and one whose care did not go well. We used thematic analysis to identify elements of complex adaptive systems found in physician descriptions of the care they provided.

Results: Participants recognized their role in a system of care and emphasized the importance of high-quality communication and collaboration among clinicians. They described their "workarounds" of organizational procedures to provide care, integrating biomedical, behavioral, and psychosocial complexity and adapting practice for each context. Meeting the psychosocial needs of their patients was particularly challenging; participants reflected on how they discussed these needs with their colleagues and on the culture of medicine.

Discussion: This study offers insights regarding how physicians recognize and approach clinical care as a complex adaptive system. Teaching about complex adaptive systems during medical training could help learners prepare for the workarounds, adaptations and challenges in caring for the whole patient.

OD-3-5 <u>Delivering Virtual Autism Supports for Wait-times</u> (SLED-VAST) using a Student-Led Environment

Amanda Binns, Holland Bloorview Kids Rehabilitation Hospital - University of Toronto

Background/Purpose: Innovation in the form of Student-Led Environments (SLEs) can provide workplaceintegrated learning, alleviate system and capacity pressures, and address gaps in community services. Waittimes for autistic children occur during multiple points in their health and social care journey, including waiting for diagnosis, treatment, and school services. Using the innovative SLE education/care model, aligned to a transformative education approach, Student-Led Environment to Deliver Virtual Autism Supports for Waittimes (SLED-VAST) was launched and prepares speechlanguage pathology, occupational therapy, and social work learners in (a) early autism identification and (b) collaboration at the healthcare/education interface.

Methods: A developmental evaluation (DE) explored interprofessional learners' and family/patient partners' experiences in SLED-VAST. The DE approach is aligned as it is suited to innovators, facilitating real-time feedback for program iterations. Semi-guided interviews with learners and family/patient partners traced the impacts of the experience, providing useful data to make evidence-informed program decisions.

Results: SLED-VAST fostered critical reflection through evidence-informed education as learners began to disrupt assumptions (e.g. norms related to autism), increased mutual respect across professions, and enacted patient/family-centred care. Data-driven programmatic decisions included balancing theoretical/practical content and self-discovery/guidance.

Discussion: SLEs using transformative education approaches can enhance collaborative and compassionate care for autistic children and their families while building interprofessional workforce capacity. SLED-VAST enabled learners to practice collaboratively within a real-world clinical context that meaningfully included patients/families and integrated all health professions' experiences and knowledge. Future SLED-VAST iterations will include more professions (medicine, nursing), continuing to provide interprofessional autism training while providing wraparound support services and promoting social inclusion.

OD-4

Teaching and Learning - Indigenous Health

OD-4-1 Addressing anti-Indigenous racism in medical education: Updates from the NCIME Assessment working group.

Marcia Anderson, NCIME

Background/Purpose: The National Consortium for Indigenous Medical Education (NCIME) provides leadership in areas of common priority that reform and update the education of physicians and create education contexts, tools, and resources the lead to culturally safe health care delivery. This presentation will focus on the recommendations and innovations being developed and advanced by the NCIME Assessment of Indigenous Studies, Cultural Safety, and Anti-racism in Medical Education working group. The Assessment working group has developed the following deliverables: the Guidelines for the Development of Indigenous Studies, Cultural Safety and Anti-racism Assessment in Medical Education, the Implementation Toolkit, and Sample Questions for Examinations.

Methods: The Assessment working group is a collective of Indigenous clinicians, researchers, and community experts that have collaboratively developed and put forth recommendations to address the ongoing anti-Indigenous racism in medical curriculum.

Results: This working group is nearing the completion of these deliverables and is entering the next phase which will involve advancing and putting forth our recommendations, we would like to take the opportunity to share the content we have created.

Discussion: The advancements put forth by the NCIME Assessment working group are an important intervention to Canadian medical contexts that seek to meaningfully uptake reconciliatory efforts, and meaningfully address anti-Indigenous racism and the lack of cultural safety in medical education contexts. The importance of this work rests in its attention to addressing the persistence of antiracism, bias in assessment, and the lack of cultural safety in medical education in Canada. As such, this work has broad applications across medicine in Canada.

OD-4-2 <u>A systematic review of motivational design for online instruction in health professions education</u>

Ryan Brydges, University of Toronto

Background/Purpose: Educators' choices regarding how to design online instruction can influence learners' motivation to learn. We aimed to appraise experimental comparison studies of motivational design strategies for online instruction in health professions education (HPE). Specifically, we appraised the motivational constructs researchers have targeted and the methodological characteristics of existing studies.

Methods: We searched six major databases from 1990 to August 2022. Studies were included if they compared online instructional designs intending to support a motivational construct (e.g., interest) or motivation in general, among learners in licensed health professions. Two team members independently screened and coded studies regarding the motivational theories used, motivational constructs targeted, risk of bias, and use of ecologically valid educational contexts.

Results: From 10,584 records, we included 46 studies. Researchers tested instructional designs intended to make instruction more interesting and fun (n=23) far more than they tested instructional designs intended to support extrinsic value (n=9), confidence (n=6), social connectedness (n=4), or autonomy (n=2). A focus on intrinsic value beliefs/motives appeared most in studies not informed by a theory of motivation. Both randomized and quasi-experimental studies frequently utilized a natural setting (i.e., they delivered instruction to participants remotely), while quasi-experimental studies more commonly utilized natural treatments and natural behaviours.

Discussion: Researchers have primarily focused on motivating learners by making online instruction more interesting, enjoyable, and fun. We recommend that future research investigate instructional design strategies targeting other high-yield motivational constructs. Doing so can provide educators with a broader tool-kit of strategies to support learners' motivation in online settings.

OD-4-3 <u>Examining clinical workplace teaching about</u> mental health using learning analytic

Senley Ross, University of Alberta

Background/Purpose: Family physicians are the healthcare providers most likely to see patients with mental health concerns. As such, it is essential that family medicine residents learn about how to address mental health concerns as part of their training. In this study, we investigated how often mental health issues are encountered in clinical workplace training during family medicine residency, using learning analytics of completed workplace-based assessments.

Methods: We conducted a secondary data analysis of deidentified FieldNotes from 2019-2022 (N=18,249). FieldNotes include information about the patient presentation observed, and a brief summary of feedback shared with a resident. As such, they can serve as a proxy for the clinical teaching that happens in residency. We searched the database using the following terms: mental health, psychiatry, addiction, substance use/misuse/abuse, ADHD, suicide (and related terms), anxiety, depression, and eating disorders. Extracted data were analyzed using descriptive statistics and data visualization.

Results: The search resulted in 1405 FieldNotes, with anxiety (AX) and depression (DE) appearing most often (2019: AX=150, DE=150; 2020: AX:159, DE=153; 2022: AX=160, DE=103). The search term 'mental health' resulted in 76 FieldNotes for 2019, 93 for 2020, and 91 for 2022. The other search terms combined accounted for the remaining FieldNotes extracted. Overall, a steady increase was seen over time in the number of FieldNotes about mental health topics.

Discussion: These findings suggest that family medicine residents experience a large amount of clinical workplace teaching about mental health. This study supports use of learning analytics to examine clinical workplace teaching in residency programs to identify gaps and strengths.

OD-4-4 Perceived Importance of Transition to Practice Competencies by Psychiatry Residents in Canada: A Cross-Sectional Evaluation

Certina Ho, University of Toronto

Background/Purpose: It is important to ascertain gaps in final year teaching to prepare postgraduates in their transition to practice.

Methods: An questionnaire was sent to all senior psychiatry residents (PGY4 and above) in Canada via the Coordinators of Psychiatric Education (COPE) from January to March 2023. Residents were asked to rank the Royal College TTP competencies based on perceived levels of importance. Rankings were converted into quantitative data with 1 = Least Important and 5 = Most Important. Additionally, residents were given the opportunity to include open-ended comments addressing other aspects of training they felt were important but not captured in existing TTP competencies.

Results: We received 72 responses (57% PGY4 and 42% PGY5) from 15 of 17 Canadian medical schools. The top 3 TTP competencies were management of adverse events, practice management, and business aspects of practice. The TTP competencies ranked as least important were evaluating costs of patient treatment in different settings, quality improvement initiative, and social media training. Areas not captured by the Royal College TTP competencies that residents perceived as important included managing practice-related finances, and how/where to apply for jobs.

Discussion: Insights gained from this evaluation provide an opportunity to refine the PGY5 TTP curriculum in psychiatry residency training. Educators and curriculum designers may focus on prioritized TTP competencies perceived by residents. Furthermore, areas determined by residents as valuable but not captured by the Royal College TTP competencies reflect unmet needs in psychiatry residency training where development of supplementary resources may be needed going forward.

OD-5

Accreditation - Indigenous Health

OD-5-1 To prove or improve? Examining how paradoxical tensions shape evaluation practices in accreditation contexts

Betty Onyura, University of Toronto & Centre for Addiction and Mental Health

Background/Purpose: Although programme evaluation is increasingly routinised across the academic health sciences, there is scant research on the factors that shape the scope and quality of evaluation work in health professions education. Our research studies how the context in which evaluation is practised influences the type of evaluation that can be conducted. Focusing on the context of accreditation, we examined the types of paradoxical tensions that surface as evaluation leads consider evaluation best practices about contextual demands associated with accreditation-seeking.

Methods: Our methods were semi-structured qualitative interviews and situated within a critical realist paradigm and analysed using framework and matrix analyses. The 29 study participants had roles requiring responsibility and oversight of evaluation work across 26 academic health science institutions.

Results: We identified three overarching themes: (i) absence of collective coherence about evaluation practice, (ii) disempowerment of expertise, and (iii) tensions as routine practice. Examples of these latter tensions in evaluation work included (i) resourcing accreditation versus resourcing robust evaluation strategy (ii) evaluation designs to secure accreditation versus design to spur renewal and transformation and (iii) public dissemination of evaluation findings versus restricted or selective access.

Discussion: Our study demonstrates how the high-stakes context of accreditation-seeking surfaces tensions that can risk the quality and credibility of evaluation practices. To mitigate these risks, we propose strategies that may optimise the quality of evaluation work alongside accreditation-seeking efforts. Our research highlights the limitations of continually positioning evaluation purely as a method versus a socio-technical practice highly vulnerable to contextual influences.

OD-5-2 Validating a tool for comparing Accreditation Standards across Health Professions Education (HPE) programs. A case study at the University of Manitoba (UM).

Ricardo Soriano, University of Manitoba

Background/Purpose: Institutions pursuing multiple HPE accreditations encounter challenges in responding to similar requirements from different national accreditation bodies. A tool to compare accreditation standards with the goal of identifying common themes across health professions educational programs can provide valuable insights into institutional data collection, policy development, and allocation of resources (Wilkerson, 2016; Fishbain, 2019). The purpose of this study is to develop a tool to identify common areas and trends across health professions accreditation standards. Standards in 13 programs in the Colleges of Medicine (undergraduate & postgraduate medical education, genetic counselling, clinical health psychology); Nursing (bachelor, nurse practitioner, midwifery); Pharmacy (pharmD); Dentistry (dental medicine, dental hygiene); and Rehabilitation Sciences (occupational, respiratory and physical therapy) at the UM were examined.

Methods: We used Template Analysis (King, 2017) and Document Analysis (Cleland, 2022) to assess the most recent versions of the standards. The categories set by Hagerty (1989) for comparing accreditation standards were used as preliminary codes. To validate the currency of the coding, 4 researchers independently read all standards documents, mapping each requirement under a category. Where a requirement could not be mapped, a suggestion for a new category was noted. The researchers met to find consensus on new categories. NVivo software confirmed the relevance of the categories.

Results: A validated tool to identify common themes across health educational programs accreditations was created.

Discussion: Defining common requirements across HPE accreditation standards can be a first step in the process of improving institutional efficiency. Common accreditation needs can inform institutional decision making.

OD-5-3 <u>Misiway Innuweuk – Living a Good Life, For Everyone.</u> A <u>Traditional Healing and Wellness</u> Accreditation Framework.

Nicole Blackman, Indigenous Primary Health Care Council

Background/Purpose: In supporting Traditional Healing (TH) programs, and those who work within them such as Traditional Practitioners, employers continue to experience significant workforce challenges. These include but are not limited to: • Absence of structured credentialing process. • Paucity of learnings available for the next generation of Traditional Practitioners. • Human health resources crisis that is impacting all forms of practitioners in health care, including Traditional Practitioners. • Lack of equity in pay and professional recognition between Western and Traditional practitioners.

Methods: To address the challenges brought to light thus far, IPHCC created an 'accreditation' framework that is grounded in culture while establishing structure, sustainability, and accountability. The areas of focus currently include credentialling, mentorship, cross-sectoral collaboration, and equitable professional recognition.

Results: While a structured process such as accreditation is a Western approach that does not necessarily equate to Indigenous ways of knowing, developing an Indigenous-led framework with culturally appropriate considerations and guiding principles is imperative. Mainstream continues to include traditional healing and Indigenous cultural service support within legislation, setting expectations for mainstream organizations and practitioners to incorporate into service delivery. However, there are currently no specific standards guiding considerations for actualizing government expectations, in which standardization and accountability are key components.

Discussion: Through the Misiway Innuweuk Living a Good Life, For Everyone, a TH accreditation framework, the intent is to actively strengthen safety, quality, and effectiveness for traditional healing programming for those accessing and providing services.

OD-5-4 <u>Guiding the needs assessment process from application to review: Research and perspectives from a Canadian Continuing Professional Development Office</u>

Dr. Suzan Schneeweiss, University of Toronto

Background/Purpose: Writing rigorous needs assessments that incorporate perceived and unperceived needs is challenging. CPD Planners and Program Directors report that summarizing needs can be time-consuming and onerous. Accreditation Reviewers acknowledge submitted information is sometimes incomplete. As part of an internal quality review process, we sought to identify opportunities for improving the accreditation application process to create continuing education for healthcare providers that contributes to better health care outcomes.

Methods: We employed a descriptive analysis approach: gathering reviewer feedback data on accreditation applications submitted between 2020 and 2023, producing descriptive statistics (using SPSS) on reviewer scores for application components (including: final decision, target audience, financial, needs assessment, learning objectives, program design, and evaluation), analyzing needs assessment and learning objective reviewer feedback, and coding in NVivo to identify possible target areas for change.

Results: We analyzed 619 applications. Needs assessment and learning objectives components were strong contributors to programs requiring revisions upon review. Missing unperceived needs and providing non-measurable/observable learning objectives were primary reasons for requiring revision. We adapted a needs assessment template to better support CPD applicants. The guide provides a concise form of reporting perceived and unperceived needs, program goals, and learning objectives while clarifying Canadian accreditation requirements.

Discussion: Although specific accreditation requirements differ between jurisdictions, educating planning committees on the use of multiple data sources to identify perceived and unperceived needs, and demonstrating links between needs and program goals and objectives is a common goal and may strengthen the effectiveness of CPD programming to achieve practice change and contribute to improved healthcare outcomes.

Instructional Methods: We employed a descriptive analysis approach: gathering reviewer feedback data on accreditation applications submitted between 2020 and 2023, producing descriptive statistics (using SPSS) on reviewer scores for application components (including: final decision, target audience, financial, needs assessment, learning objectives, program design, and evaluation), analyzing needs assessment and learning objective reviewer feedback, and coding in NVivo to identify possible target areas for change.

OD-5-5 NCIME Curriclum Working Group: Addressing the gaps in curriculm and providing the tools for faculty to impliment longitudinal Indigenous health curriculum.

Alexandra Nychuk, National Consortium for Indigneous Medical Education

Background/Purpose: The CanMEDs competencies framework in Canada is recognized as the foundation of medical training and practice. In 2009 The First Nations Inuit Métis (FNIM) Health Core Competencies: A Curriculum Framework Undergraduate Medical Education was published by the Aboriginal Health Curriculum Subcommittee. The National Consortium for Indigenous Medical Education's (NCIME) Improving Cultural Safety in Curriculum Working Group (ICSCWG) was tasked with updating this document to include current Indigenous policy such as the Truth and Reconciliation Commission's 94 Calls to Action and developed a tool identifying faculty development needs to support the implementation of longitudinal Indigenous health curriculum.

Methods: The ICSCWG is comprised of Indigenous physicians, academics, and Indigenous health support staff. Together, this group was tasked with identifying gaps in the current medical school UGME curriculum. This report was used in conjunction with the new policy to inform the updated FNIM Health Core Competencies: A Curriculum Framework Undergraduate Medical Education.

Results: The updated Core Competencies will be used to inform medical school assessments and medical school curriculum through demonstrating the provision of culturally safe care, the diversity of FNIM peoples, the recognition of traditional medicine, and a deeper understanding of the complex ways in which policy implicates Indigenous health.

Discussion: The tragic deaths of Brian Sinclair and Joyce Echaquan demonstrated the need for delivery of antiracist healthcare, however, up until this document there lacked an up-to date national standard for medical training competencies pertaining to FNIM care delivery.

OD-6

Mélange

OD-6-1 <u>Can Discord be used in medical education? An</u> assessment of the CASPER Prep Program

Jane Jomy, University of Toronto

Background/Purpose: The Computer-based Assessment for Sampling Personal Characteristics (CASPER) test is used by medical school admission committees to assess situational judgement among applicants. CASPERPreparation Program (CPP) provides coaching and mentorship toUnderrepresented Minorities in Medicine (URMMs) in a classroom. This year, CPP used Discord, a free communication platform commonly used for entertainment and gaming, to allow students to participate in practice scenarios and increase studenttutor engagement. Seldom used in educational contexts, we aimed to assess the feasibility of using Discord to enhance engagement between CPP students and tutors.

Methods: Post-program questionnaires were completed by the students based on their experience using the Discord platform with a 5-point Likert scale and openended questions.

Results: Post-program questionnaires were completed by 70 students. The majority of participants report Discord can be used as an educational tool (89%; n=62), facilitated engagement in practice questions (80%; n=56), and was user-friendly (74%; n=52). While 86% of students were confident in using Discord by the end of the course , some improvements were suggested such as providing a step-by-step guide for Discord novices.

Discussion: Teaching in online classrooms has increased significantly since the eve of the COVID-19 pandemic. It is imperative to understand how learners engage with platforms such as Discord and its utility in order to leverage the most effective ways to support online learning in medical education. This study demonstrated most learners were supportive of using Discord as an educational platform. Future studies should compare the effectiveness of delivering education on Discord in comparison to other platforms.

OD-6-2 Understanding the characteristics and values underpinning the social innovations of medical school admissions during the COVID-19 pandemic: A multiple case-study of medical school admissions members in Canada

Asiana Elma, McMaster University

Background/Purpose: The 2020 COVID-19 onset disrupted selection processes at all Canadian medical schools as in-person interviews were no longer possible. Urgent adaptations were needed to matriculate the next cohort of students. This research describes the scale, durability, and impact of admissions adaptations made by medical schools across the 2020-2023 admission cycles.

Methods: Guided by the Theory of Social Innovation, a multiple case study was conducted with three medical schools and the Association of Faculties of Medicine of Canada Network on Admissions. Data included relevant meeting minutes and semi-structured interviews with those involved in developing adaptations in Canada. Data were analyzed within and across cases via an unconstrained descriptive approach.

Results: Adaptations included virtual interviews, lottery, or re-imagined actuarial approaches. Each case revealed exploration of adjacent possibilities; interactions with the pan-Canadian admissions community; concurrent responsiveness to other pervasive social phenomena (i.e., calls for greater racial equity); and consistent readaptation across subsequent cycles. A range of institutional values (e.g., fairness, meritocracy, equity) were reflected in adaptations; however, pandemic and resource constraints often challenged the prioritizing of some values. These were reconciled as much as possible in subsequent re-adaptations.

Discussion: Canadian medical schools faced many challenges and demonstrated considerable flexibility and social accountability in navigating the ongoing disruption. Admission processes have undergone numerous changes since 2020, some of which are likely to be durable. The medical education community is encouraged to continue to take a values-based approach in balancing the implications of change for applicants, aspirants, and the profession.

OD-6-3 <u>Innovative EBM Education at a Regional Medical</u> Campus

Amanda Bell, McMaster University

Background/Purpose: Incorporating EBM into medical education is a crucial competency. It is a priority at the NRC to provide enhanced educational activities related to EBM.

Methods: NRC implemented monthly noon-time EBM Primer Rounds. These rounds aim to increase student-faculty engagement in EBM. Topics covered align with the Enhancing the QUality and Transparency Of health Research (EQUATOR) guidelines. Student questionnaires were used to assess the impact of these sessions.

Results: Before attending EBM Rounds in 2020, 94% (31 of 33) of students were familiar with the concept of EBM and its components. However, only 27 % (9 of 33) felt comfortable appraising research articles related to medical therapy, and 58% (19 of 33) were comfortable using PubMed. 52% (17 of 33) of students felt they did not have enough EBM resources for their level of training. In 2022, the majority of students (70% (8 of 10)) agreed that EBM Primer Rounds enhanced their knowledge. This indicates that the sessions are effective in improving understanding.

Discussion: The data from 2020 indicate a need for EBM sessions among students and show the potential impact on awareness and knowledge. The attendance range for first-year students during the 2022-2023 academic year was from a high of 79% to a low of 21%, indicating varying levels of interest and participation. There's a plan to use the Sherbrooke Self-assessment of Information Literacy Competencies Test to assess the effectiveness of NRC EBM Primer Rounds in the 2023-2024 academic year, which suggests a commitment to ongoing improvement and assessment.

OD-6-4 A framework for the development of objective academic metrics for clinical faculty development to achieve promotion

Andrea Lum, Western University

Background/Purpose: At Schulich Medicine & Dentistry, Western, all Clinical Academic physicians have appointments under the Conditions of Appointment (CAP) Physicians 2018. The CAP defines five Academic Role Categories (ARC) - Clinician Teacher, Educator, Researcher, Scientist, Administrator with broad academic principles. Full-time clinical academic physicians are expected to achieve promotion to Associate Professor (career rank) with Continuing appointment usually within seven years from initial appointment as Assistant Professor Limited Term. Clinical Chairs by themselves were able to only develop one ARC guideline for Clinician Teacher.

Methods: This 2-year framework enabled development of metric-based Guidelines of all five ARCs with rank progression. These guidelines enable faculty development of their academic goals and objective review of dossiers for rank promotion.

Results: Year 1 1. Involved all Clinical chairs and Decaonal Leaders with appropriate expertise. 2. Established three working groups to develop consensus metrics on Education, Research and Administration/Leadership. 3. These consensus metrics were submitted by the three working group chairs to Vice Dean for discussion and review. 4. The metrics were formulated into all five ARCs as Guidelines with rank progression. Year 2. 1. Five Draft ARC Guidelines were provided to Dean and Clinical Chairs for review/input. 2. Final reviewed by Chair of Clinical Chairs for pilot assessment and administrative Director Faculty Affairs for CAP alignment. 3. Final sent to University Office Faculty Relations. 4. Final five ARC Guidelines provided to Clinical Departments and Schulich's Appointment & Promotion Committee.

Discussion: This framework enabled development of five ARC guidelines for faculty development and provided objective academic promotion metrics.

OD-6-5 <u>Understanding the delay in identifying Ebola Virus</u>
<u>Disease: gaps in viral hemorrhagic fever surveillance in</u>
Uganda, September 2022

Jane Frances Zalwango, Makerere University

Background/Purpose: Early detection of outbreaks requires robust surveillance and reporting at both community and health facility levels. However, investigations after the first case in the 2022 Uganda Sudan virus outbreak was confirmed on September 20, 2022 revealed many community deaths among persons with Ebola-like symptoms as far back as July. We explored possible gaps in surveillance that may have resulted in late detection of the Sudan virus disease (SVD) outbreak in Uganda.

Methods: Using a standardized tool, we evaluated core surveillance capacities at public and private health facilities at the hospital level and below in three subcounties with earliest cases. Key informant interviews (KIIs) were conducted with 12 purposively-selected participants from the district local government. Focus group discussions (FGDs) were conducted with community members from six villages where early probable SVD cases were identified. Thematic data analysis was used for qualitative data.

Results: Forty-six (85%) of 54 health facilities surveyed were privately-owned, among which 42 (91%) did not report to DHIS2 and 39 (85%) had no health worker trained on IDSR; both metrics were 100% in the eight public facilities. Weak community-based surveillance, poor private facility engagement, low VHF suspicion index, inability to analyze and utilize data, funding constraints, lack of IDSR training, and lack of mortality surveillance were identified as gaps potentially contributing to late outbreak detection.

OD-7

Simulation and AI

OD-7-1 Piloting a structured debrief method ("SPF") for insitu simulations at electronic dance music festivals

Anthony Seto, University of Calgary

Background/Purpose: Electronic dance music (EDM) festivals are low resource environments that challenge medical teams to manage unique resuscitation cases. Consequently, it is important to simulate and debrief emergency situations, prior to event start. Post-simulation debriefs should be organized, thorough, and psychologically safe, to capture feedback from every perspective so that team processes and clinical care environment can be optimized.

Methods: A debrief model for in-situ simulation use at 2 EDM festivals was developed by the Event Medical Director covering these events. This model, "SPF" (Self-Peer-Facilitator), was created by combining and adapting elements of the PEARLS Healthcare Debriefing Tool with the debrief approach contained within Lifesaving Society's leadership courses. The 5 steps include: setting the agenda, case summary, debrief (self-reflection, peer feedback, and then facilitator feedback), medical discussion, and take-homes. During the debrief, each individual shares "feelings, strengths, and suggestions". A post-simulation survey was used to capture feedback.

Results: 9 participants provided feedback. Agreements to statements were rated (1=strongly disagree, 5=strongly agree). The following was rated 5/5 on average: "opportunity to share everything on my mind", "strong understanding of team's strengths", "strong understanding of team's challenges/limitations", "psychologically safe", "organized". "Obtained quality insights/lessons" was rated 4.89/5 on average.

Discussion: The SPF Debrief Model was well-received by simulation participants at EDM festivals. The model includes speaking time for everyone. It captures feelings first to obtain frames and provides opportunity to address potential emotions early. The model is participant-focused; discussions end with the facilitator. As each participant shares, the facilitator can further provide commentary and link/chain ideas/thoughts.

OD-7-2 "TEAM SIM": No impact on venue (simulation lab, online, or room) on medical students' rating of escape game curriculum for teamwork skills training

Anthony Seto, University of Calgary

Background/Purpose: The inaction of post-graduate medical education to invest in standardization of transgender health training has been recognized as a concern by both physicians and members of the transgender community. Closing this education gap and improving transgender healthcare access necessitates the development of consensus-built transgender health objectives of training (THOT), particularly in Endocrinology and Metabolism Residency programs.

Methods: We conducted a two-round modified Delphi process with a national panel of experts (n= 20) to identify THOT for curricular integration. Participants used a 5-point Likert scale to assess the relative importance of THOT, with opportunities to provide written feedback throughout. Data was collected through Qualtrics and analyzed after each round.

Results: In the first Delphi round, panelists reviewed 81 literature-extracted THOT and produced consensus on all objectives. Based on panelists' comments, 5 THOT were added, 9 were removed, 34 were combined into 12 objectives, and 47 were either reworded or remained the same, such that, in the second Delphi round, panelists assessed 55 THOT. After the second Delphi round, consensus was reached for 8 THOT. Post-Delphi feedback from program directors led to further combination of objectives to arrive at a final set of 4 THOT for curricular inclusion.

Discussion: To our knowledge, this is the first time an evidence- and consensus-based approach has been used to establish THOT for any postgraduate medicine subspecialty program across Canada or the United States. Our results lay the foundation towards health equity and social justice for transgender health medical education, offering a templated process for future innovation.

OD-7-3 Integrating Artificial Intelligence into Medical Education: Implementation and Evaluation of a Post-Graduate Medical Curriculum for Appraising Al Studies

Gemma Postill, University of Toronto

Background/Purpose: With the exponential increase in research and implementation of artificial intelligence (AI) in medicine, there is increasing recognition for and need to better integrate AI in medical education. Medical trainees themselves support the need for a basic understanding of AI. However, there is limited research describing the design, implementation, and evaluation of AI medical education at the post-graduate level.

Methods: We created a 90-minute educational seminar for postgraduate medical trainees that focuses on how to critically evaluate and apply medical AI findings to clinical contexts. The session included a didactic introduction to AI in medicine and an interactive journal club to evaluate a medial AI paper using a published AI appraisal framework. The effectiveness of our curricula was evaluated through pre/post surveys.

Results: All medical residents believed physicians should receive training on medical Al tools; however, 42.1% had never received Al education, and 77.8% reported a lack of confidence in assessing medical Al studies. Likewise, only 27.8% correctly identified machine approaches (e.g., scoring 2/2 on the knowledge quiz). Our session significantly improved both confidence (90.9%) and knowledge (63.6%) of medical residents. Students reported benefitting from the session's interactive components, introductory level, and tailoring to medicine.

Discussion: We demonstrate both interest in AI as well as an effective format for conveying the foundational principles of AI into post-graduate medical education. Our findings can be used by future educators and program coordinators seeking to integrate or bolster the integration of AI in medical education.

OD-7-5 <u>Perceptions of Artificial intelligence in medicine:</u> the pecking order of professional hierarchy

Sherwin Rajkumar, Western University

Background/Purpose: Artificial intelligence (AI) has evolved rapidly in recent years, and understanding perceptions of AI in medicine among healthcare professionals (HCPs) is crucial for informed integration. We sought to better understand the perceived opportunities and threats of AI amongst premedical students, medical students, and physicians.

Methods: We used key search teams to identify relevant threads in the r/premed, r/medicalschool, and r/medicine subreddits between December 2022 and August 2023. Comments were inductively coded and then we conducted a content analysis to followed by a discourse analysis for a nuanced understanding of perspectives.

Results: We analyzed 2403 comments across 55 threads. The main themes identified in our content analysis were Al enhancement versus replacement – lively discussions over the extent to which AI would be integrated into healthcare. Perceived benefits were in administrative duties, whereas there was skepticism regarding Al's inability to replace human compassion. Within our discourse analysis we noted that language was used to propagate professional hierarchy; careers perceived as lower on the hierarchy were deemed most likely to be replaced by AI. AI was thought to more likely replace nonmedical jobs first, followed by "mid-levels" (non-physician HCPs). With regards to AI replacing physicians, users distinguished primary care and laboratory/imaging specialties as "replaceable", with clinical and surgical subspecialists and surgeons being the last ones affected.

Discussion: Nuanced distinctions exist in the perceived replaceability of various medical specialties. Perpetuation of biases and devaluation of a healthcare worker's role may lead to mistrust, collaborative issues, and suboptimal integration of AI into medicine.

Block E

OE-1

Equity, Diversity and Inclusion

OE-1-2 <u>Equity, Diversity and Inclusion in Medical</u> Residency: A Quality Improvement Approach

Tanjot Singh, University of British Columbia

Background/Purpose: Pediatric residents in British Columbia provide care to a diverse patient population in a variety of urban, rural and remote settings. Despite this, there is no formal avenue or space for residents to discuss and advocate about issues around equity, diversity and inclusion (EDI) as they pertain to medical training and patient care. For example, residents may notice lack of spiritual spaces on campus. We established the Pediatric Equity, Diversity, and Inclusion Working Group (PEDI). The objectives of PEDI is to create a space in which residents can: 1) Share any concerns they have as learners and as physicians and 2) Advocate for and collaborate on changes that can be implemented at a program level.

Methods: PEDI uses a quality improvement approach for its processes. Initial stakeholder engagement spanned over several months. Committee members scoped the problem by reaching out to pediatric residents and program directors for individual interviews about which EDI concerns matter to them. This method of consultation was chosen to allow for a relational approach given potentially sensitive topics. An anonymous survey link was disseminated for those who were more comfortable in that medium.

Results: Broader themes from stakeholder engagement were identified using an affinity diagram. Advocacy efforts were tailored to these themes.

Discussion: The PEDI committee meets regularly as a smaller focus group to discuss and track progress on advocacy efforts and to discuss emerging issues. As examples, PEDI has been able to advocate for a new spiritual room in the hospital and changes to internal hiring practices.

OE-1-3 Evaluating Equity, Diversity, Indigeneity, Inclusion, and Accessibility related work in faculty promotions in higher-education institutions: a scoping review.

Paul Yoo, The Hospital for Sick Children

Background/Purpose: Equity, Diversity, Indigeneity, Inclusion, and Accessibility (EDIIA) are essential principles in addressing systemic barriers experienced by equity-deserving populations. EDIIA has become a priority in higher education and academic medicine. The objective of this scoping review was to assess the extent of the literature on methods being used to recognize and evaluate EDIIA work in faculty promotions and tenure (P&T) in higher education institutions.

Methods: Scoping review was conducted to synthesize literature that address evaluation of EDIIA work of faculty members in P&T. The search strategy was run in Medline, Embase+Embase Classic, Cochrane, Scopus, and CINAHL. Citations were deduplicated and screened using Covidence. Each citation was independently reviewed by two authors; disagreements were resolved as a team. Grey literature was searched for publicly available P&T criteria from Canadian and American medical schools with at least 200 students.

Results: After deduplication, 7118 citations from 2007-2023 were screened- 10 articles met the inclusion criteria for full-text abstraction of which six were published after 2020. Most of the articles (n=7) were conceptual, noting the need for institutions to provide clarity on how EDIIA work is evaluated and recognized. Traditional research productivity metrics for P&T may not meaningfully recognize EDIIA work and its unique considerations.

Discussion: Consideration of how to evaluate and recognize EDIIA work in P&T processes (in addition to, but not only focusing on, the social identities of faculty) is an important next step for higher education institutions to put EDIIA principles into practice.

OE-1-4 <u>Creating fairness in residency selection in a CCFP-</u> EM residency program by redesigning selection tools

Munsif Bhimani, Western University

Background/Purpose: This research highlights the need to mitigate biases in residency selection by critically evaluating and improving selection processes.

Methods: A fairness committee was created within our residency program tasked to redesign selection tools with a bias mitigation strategy. Novel selection tools included anonymization of applicants and a transparent interview process with objective scoring. REB approval was obtained to study the subsequent impact. Gender, school of Family Medicine residency, and location of Medical School data was collected from CaRMS. Proportions were compared 2 years before and 2 years after adoption of the new selection methods using chi-squared testing.

Results: Prior to the work of the fairness committee, successfully matched applicants were 20% external candidates, vs 36.8% external candidates after this work, a 16.8% increase (95%CI -11.1% to 41.9%; p=0.25). Prior to the work of the fairness committee, 25% of program cohort was female. After this work was adopted, 53% of the program cohort was female, a two-fold increase (Δ 27.6%, 95%CI -2.7% to 51.9%; p=0.08). Prior to the new selection tools, external candidates were 88% of the applicant pool and 55% of the matched cohort. Following the changes, external candidates increased from 55% to 89.5% of matched applicants (Δ 34.5% 95%CI 6.2% to 56.6%; p=0.02).

Discussion: The creation of a fairness committee identified and mitigated multiple biases in residency selection processes. New selection tools were created. Implicit and explicit biases in selection methods were identified and removed. Subsequent profiles of incoming matched candidates were then evaluated and demonstrated improved diversity in just a few parameters analyzed.

OE-1-5 <u>Publish, Perish, and Precarity: a qualitative study of medical scholars' experiences of academic productivity during the COVID-19 pandemic.</u>

Sophie Soklaridis, Centre for Addiction and Mental Health; University of Toronto

Background/Purpose: The COVID-19 pandemic exacerbated existing inequities in academic medicine. Early analyses focused on the disproportionate impact of pandemic restrictions on the productivity of women scholars. However, there was a lack of literature exploring the experiences of scholars through an intersectional lens. To address this gap, we conducted a qualitative study with the aim of exploring medical scholars' intersectional experiences of managing their academic activities during the COVID-19 pandemic.

Methods: Applying a constructivist grounded theory lens, we conducted semi-structured interviews with 24 medical scholars in Canada. We aimed to interview scholars who held varying levels of institutional power and who identified as members of equity-deserving groups. We used neoliberalism as a 'sensitizing concept' to approach our analysis; working towards a theoretical understanding of how participants' experiences interacted with meritocracy, performativity, and individualism in academic medicine.

Results: A core overarching theme was the interplay between participant's productivity during the pandemic and broader concurrent social movements. From there, we constructed three major themes: 1) "Fixing" the problem; 2) Why change feels (im)possible; and 3) The breakdown of the neoliberal promise. In our analysis, we explored how these themes interacted to produce a sense of disillusionment amongst some scholars, altering their relationship to the concept of productivity.

Discussion: Our findings provide insight into how medical scholar's relationship to current working norms in academia may have shifted in the wake of the pandemic. We discuss how this shift may have ruptured some scholar's relationship with precarious neoliberal systems in academia that are reliant on individual competition.

Learning Objective(s): - Understand key themes around the disproportionate impact of the pandemic on the productivity of scholars from equity-deserving groups.

OF-2

EDI - Women - Black Health and Wellness

OE-2-1 <u>How women surgeons navigate gender inequities</u> in their everyday surgical lives: a qualitative study

Jillian Schneidman, McGill University

Background/Purpose: In recent years there has been more and more studies surfacing which have identified important gender inequities that exist for women in surgery. Few of this research, however, has looked at how women surgeons respond. This qualitative study centres the experience of women in surgery to examine how women surgeons navigate the gender inequities that they face within their everyday surgical lives.

Methods: Participant observations (67 hours) and semistructured interviews (6) were conducted with women surgeons from various subspecialties in a Canadian academic hospital to explore how women surgeons address the everyday inequities that they experience being a woman in surgery. Data was analyzed iteratively and organized thematically.

Results: Although the data suggested that gender inequities were widespread within women surgeons' everyday surgical lives, women surgeons largely did not see it as significantly impacting their own practice. In fact, rather than viewing their gender as being detrimental to the surgical world, they saw it as benefiting the profession by bringing unique qualities and skills. However, when it came to directly challenging gendered experiences in the surgical environment, they remained limited in the ways they could do so, often using coping mechanisms to avoid drawing further attention to themselves.

Discussion: This study reveals how women surgeons both resist and conform to the gender inequities that they experience within their everyday surgical lives. It provides insight into transformations that are possible but also difficulties that still remain in recognizing and reacting to gender inequities in surgery.

OE-2-2 <u>Voluntold' to Lead: Women Physicians in Academic</u> Medicine

Richard Oyefeso, University of Ibadan

Background/Purpose: Nigeria has the second highest infant mortality rate in the world. >700 babies die daily, many from preventable causes; mainly Birth Asphyxia, Prematurity and Infections. Sixty percent of women do not deliver in the hospital. Maternal mortality rate, 2nd highest in the world. High Poverty levels prevail.

Methods: 4 Breath 4 Life started over a decade ago by Diaspora partners to address health disparities. Birth Asphyxia was targeted via the Helping Babies Breathe Program. The campaign 'Every Baby Lives', provider training on basic resuscitation skills. Trainees provided ambubags and suction devices. Over the years, supporting orphanages, free health clinics, scholarships & open heart surgery for vulnerable children (Heart 4 Nigeria)

Results: Many providers had limited knowledge of basic neonatal resuscitation techniques. Many had never used an ambubag before. Some trained had no regular access to ambubags. Children mislabeled as stillbirth due to inadequate knowledge. Providers enthusiastic for learning, Doctors, Nurses, Midwives, Community Health Extension Workers and Traditional Birth Attendants. Essential newborn care also incorporated.

Discussion: Financial constraints are obstructing scaling. Government efforts, political will are grossly inadequate. NGO efforts have been suboptimal. Thousands of providers trained across the country with many more to train. Organizations exist in silos thus the need for collaboration. Recent partnerships with Pediatric Association of Nigeria (PAN) and the Nigerian Society for Neonatal Medicine (NISONM) leading to year round training in Lagos, Zaria, Ibadan, Asaba, Enugu, Maiduguri and Port Harcourt. 4B4L to act as facilitator between CANPAD, ANPA, PAN, NISONM, expanding efforts for impact.

OE-2-3 Women in surgery: a qualitative study of gendered experiences within everyday surgical life

Jillian Schneidman, McGill University

Background/Purpose: Women now make up over half of all medical graduates in Canada yet continue to remain significantly underrepresented within the field of surgery. Strategies to-date have largely focused on increasing numbers and targeting women themselves, rather than looking at more subtle ways that gender inequities are embedded within the institution. This qualitative study centers the experiences of women in surgery to look at the gendered processes that are occurring within the background of women surgeons' everyday surgical lives.

Methods: Participant observations (67 hours) and semistructured interviews (6) were conducted with women surgeons from various subspecialties in a Canadian academic hospital to examine the role that gender plays within their everyday surgical life. Data was analyzed iteratively and organized thematically.

Results: The data suggested that gender subtly impacts women surgeons' surgical life in a multitude of ways. Their social positionings within the surgical hierarchy was disproportionately affected as they were often associated with and to the less 'complex' surgical cases and subspecialties. Additionally, women surgeons faced stereotypical gendered assumptions and expectations from others which directly challenged their credibility as surgeons. Lastly, they encountered difficulties with the surgical materials in their daily practice due to their bodies not matching with how the materials had been designed.

Discussion: This study reveals inequities that are present for women surgeons within their everyday surgical lives. Moving forward, these forms of discrimination must be acknowledged to advance the understanding of and strategies for gender inequity in surgery.

OE-2-4 An analysis of coping strategies used by racialized women clinicians' providing diabetes care

Catherine Yu, St. Michael's Hospital

Background/Purpose: Racialized women clinicians (RWCs) face multiple forms of discrimination, including gender and racial prejudice, as they carry out their responsibilities in healthcare settings. The mistreatment they endure limits their professional growth and adds stress to an already demanding job. With this complex backdrop, this study seeks to analyze the coping mechanisms RCWs utilize in managing the emotional and professional challenges that come from such stressors.

Methods: Semi-structured interviews were conducted with 24 RCWs. Participants were recruited via convenience and virtual snowball sampling, and included physicians, nurses, social workers, and registered dieticians, in Canadian diabetes care settings. 45 to 60 minute interviews were conducted using semi-structured interview guides, analyzed using a constructivist grounded theory approach, and mapped to the Coping Inventory for Stressful Situations from which themes were formed.

Results: We identified four themes: (1) Silence and inaction are coping responses driven by fear of professional consequences and emotional burnout, (2) RWCs transform perceived disadvantages into opportunities without directly confronting mistreatment, (3) Some participants engage in advocacy and direct resolutions with perpetrators of biased and prejudiced mistreatment, and (4) Time and experience impact the evolution of coping strategies, self-efficacy, and advocacy.

Discussion: This study illuminates coping mechanisms employed by RWCs in various healthcare settings. These findings necessitate institutional reforms, including open and safe communication channels and a culture that supports advocacy. Additionally, the results underscore the importance of mentorship programs, suggesting that they could benefit young clinicians by providing them with the tools to respond to mistreatment and empowering them to advocate for change.

OE-2-5 <u>ICE - Immersive Clinical Experiences in Virtual</u> Reality

Zachary Rothman, University of British Columbia

Background/Purpose: The stress of becoming a practicing doctor, difficulties applying existing knowledge in clinical settings, and navigating new and complex clinical environments are challenges faced by today's medical undergraduate students (Hawkins et al., 2021). UBC Medicine's distributed undergraduate curriculum poses additional challenges for learners in providing equitable access to patients in pre-clinical years. Medical learners could benefit from increased exposure to clinical experiences in immersive, low-stakes learning environments.

Methods: UBC Faculty of Medicine's EdTech team embarked on a multi-year journey of developing high-fidelity, high-impact, immersive VR simulations for undergraduate medical learners. In these VR simulations, Year 2 learners work in Virtual Reality through the process of history, physical exams, laboratory and diagnostic investigations to diagnose and recommend treatment for patients in the ER. By working with learners as designers, prototyping, and piloting the project over 2 years, EdTech has been able to iterate, improve and develop new Virtual Reality experiences.

Results: We have drawn student feedback from 2 years of curricular pilot (400 learners) and QI study. We will examine our findings and share how the feedback is being implemented in the creation and implementation of new Virtual Reality experiences.

Discussion: Simulation can help to overcome real hurdles in an increasingly distributed educational model. Virtual Reality is a powerful tool within the spectrum of simulation in medical education that is within the grasp of faculty and staff across medical schools. Multidisciplinary teams are essential to creating these experiences.

OE-3

Physician and Medical Student Health and Well-being - Burnout

OE-3-1 <u>The Influence of Physician-Parents on the Pursuit</u> of Medicine: A Motivational Perspective

Herman Dayal, Western University

Background/Purpose: Pursuit of a career in medicine requires thoughtful consideration of several internal and external factors. Self-determination theory places a strong emphasis on the importance of intrinsic motivation in learning, in contrast to extrinsic forms. While it is understood that familial pressures can exert considerable influence on career planning, it remains uncertain how this extrinsic motivator might affect self-determination in medicine, particularly when those familial pressures stem from parents who are themselves physicians.

Methods: Medical school aspirants, students, and residents were recruited using a broad recruitment strategy (email and social media) to complete a standardized 7-point-Likert survey (Situational Motivation Scale (SIMS)) to assess their motivation for pursuing medicine in four domains (intrinsic motivation, internal regulation, external regulation, amotivation). Respondents also indicated whether they had a parent or caregiver who was a physician.

Results: 218 trainees completed the survey over a sixmonth period (n= 33 with physician-parents). Overall, respondents' motivation for medicine was largely intrinsic (5.35 +/- 0.19). However, learners with physician-parents, compared to learners without, displayed a significantly higher degree of external regulation (2.61 +/- 0.58 vs. 2.01 +/- 0.22, p<0.0001) and amotivation (2.03 +/- 0.47 vs. 1.71 +/- 0.19, p=0.01).

Discussion: Medical trainees with physician-parents may be more susceptible to external pressures in their pursuit of a medical career. Considering the potential for burnout associated with amotivation, this study underscores the need to explore the specific experiences, pressures, and wellbeing in these students. Additionally, longitudinal studies could investigate the long-term impact of physician-parent influence on medical students' career satisfaction.

OE-3-2 <u>Burnout in Canadian Medical Students: A Survey of</u> <u>Third-Year Clerks</u>

Haley Leider, University of Ottawa

Background/Purpose: Burnout is a common experience among medical students, and is associated with increased rates of depression, substance use, and suicidal ideation. Burnout prevalence is on the rise, necessitating the reevaluation of burnout in vulnerable trainees during their first year of clinical exposure.

Methods: 164 third-year medical students at a Canadian university were surveyed between February-May 2023 during their first year of clinical clerkship. The virtual survey, which included demographic factors (gender, age, academic stream - anglophone vs. francophone, number of household co-habitants, average self-care hours per week, prior personal or familial connection to school location, and residency specialty of choice) and the Oldenburg Burnout Inventory (OLBI) yielded a 25% response rate (41/164). Linear regression analyses were conducted using the Imer4 package (Douglas Bates) and RStudio.

Results: Students interested in pursuing non-surgical specialties were at a significantly higher risk of burnout compared to their surgically-inclined colleagues (surgical vs. non-surgical mean(SD)=21.5(10.6) vs 26.6(5.3), p=0.002). Higher cumulative weekly self-care hours appeared to be protective against exhaustion (mean(SD) exhaustion scores: 7+ hours/week 12.5(3.7); 4-6 hours/week 13.8(3.3); 1-3 hours/week 17.4(3.3), p=0.03).

Discussion: This work serves as a baseline measure of burnout among students early in their medical training. It highlights self-care as a potential ameliorator of burnout burden, thereby suggesting the need for a cultural shift that promotes the allotment of time to self-care activities to combat the burnout epidemic.

OE-3-3 Assessing Resident Experience Among Different Residency Specialties in a Large Canadian Academic Institution

Ran Huo, University of Calgary

Background/Purpose: Burnout, commonly defined as a state of mental and physical exhaustion, is a widespread concern among residents, with detrimental effects on resident wellness and patient care. While factors influencing burnout have been studied, there is limited research on how levels of burnout compare between different specialties of medical training. This cross-sectional study aims to provide a snapshot of the level of burnout among residents in different specialties at the University of Calgary.

Methods: Participants included postgraduate residents from 27 different specialties at the University of Calgary during the 2023/24 academic year. An electronic survey, adapted from the Maslach Burnout Inventory, was distributed to assess self-reported levels of burnout, comprising of three components: emotional exhaustion, depersonalization, and sense of personal accomplishment. Data were analyzed using T-tests and ANOVA (in SPSS) to compare burnout scores.

Results: In total, 198 survey responses from 23 residencies was received, achieving a 29% response rate. On average, residents were experiencing emotional exhaustion a few times a month, depersonalization once a month or less, and a sense of personal accomplishment once a week. Analysis revealed no significant differences in emotional exhaustion and depersonalization between medical and surgical specialties. However, surgical specialties reported higher levels of personal accomplishment (a few times a week), compared to medical specialties (once a week).

Discussion: This research contributes valuable insights into the field of resident burnout, highlighting the potential impact of specialty-specific factors on residents' well-being and professional satisfaction. Further analysis may enable the implementation of targeted strategies to mitigate burnout among all residents.

OE-3-4 <u>Understanding Personal Relationships in</u> Residency and the Connections with Burnout and Mental Health

Marina Boutros Salama, McMaster University

Background/Purpose: Residency is a time of personal and professional growth that can challenge well-being, and contribute to burnout and other mental health issues. Residency may also strain intimate relationships, which can potentially buffer and protect from the stresses of training and burnout. This study seeks to understand residents' social support and intimate partner relationships, relationship quality, work-home conflict, and associations with burnout and mental health.

Methods: Residents were invited to complete a cross-sectional survey including measures of demographics, intimate relationship characteristics, social support, work and family conflict, and perceived relationship quality. Regression models were used to examine the relationships of these characteristics with burnout symptoms and mental health, measured by the Maslach Burnout Inventory and Mental Health Continuum Short-Form.

Results: Overall, 167 residents with partners responded to the survey. 73% were living together with partners, with an average relationship length of 5.4 years. Women and gender-diverse individuals reported higher levels of emotional exhaustion compared to men. Higher levels of social support were associated with better mental health and higher levels of personal accomplishment. Conflict between work and family was the most consistently correlated predictor across outcomes, with higher levels of conflict associated with greater burnout symptoms and poorer mental health. These associations remained consistent and significant after controlling for known confounders.

Discussion: This study allows us to better understand and describe residents' social support and intimate partner relationships, and connections with burnout and mental health. These insights can inform the design of burnout interventions tailored to the challenges encountered during postgraduate medical training.

OE-3-5 Evaluating the Effectiveness of Interventions for Physician Burnout: A Systematic Review and Meta-Analysis

Kestrel Mcneill, McMaster University

Background/Purpose: Physician burnout has dire implications for patient care and personal wellbeing, making it critical that we identify interventions that can prevent and alleviate its symptoms. The purpose of this study was to evaluate the effectiveness of published interventions for addressing burnout among physicians.

Methods: Databases were searched from inception to January 2023 for controlled intervention studies targeting physician burnout. Articles were screened, data extracted, and risk of bias was assessed in duplicate. Random-effects models were used for all analyses, with Hedges G and I2 being used to quantify standardized mean differences and heterogeneity respectively.

Results: Of the 4516 articles identified, 28 met inclusion criteria. These consisted of 20 randomized controlled trials and 8 cohort studies across 2,725 physicians. There was considerable heterogeneity (12 >50%) across studies, which was explained by predefined subgroup analyses of intervention type and length of follow-up. Both individual (n=22)and organizational (n=6)interventions demonstrated small but significant reductions in burnout symptoms (exhaustion, depersonalization, and personal accomplishment) in the short-term (< 3 months). However, these effects dissipated after long-term followup (> 1 year). Many studies exhibited significant methodological issues or insufficient reporting, with all articles having at least 1 domain being at a high risk of bias.

Discussion: Despite repeated calls to action, existing burnout interventions for physicians have not shown persistent improvements in burnout symptoms. Future research should prioritize the development of sustainable approaches to address this issue, while ensuring the adoption of more rigorous methods.

OE-4

Teaching and Learning - Indigenous Health

OE-4-1 TRC Call 24: Mandatory Indigenous Health UGME Course Scoping Review

Julia Billingsley, University of Saskatchewan

Background/Purpose: In 2015 the Truth Reconciliation Commission of Canada released a report sharing 94 Calls to Action, seven of which focus specifically on health, including no. 24 which calls upon medical schools to require all students to take a course dealing with Aboriginal health issues. This project is an exploration of undergraduate medical education responses to reconciliation, including kev considerations, recommendations, and limitations as identified through stakeholder interviews with regard to the implementation of such a course at the University of Saskatchewan.

Methods: This project relies on qualitative data analysis, using grounded theory as the primary methodology. Analysis utilized comparative and thematic analysis. Data was collected through semi-structured interviews with university faculty members, staff, and medical students.

Results: The study explored four primary topics: potential benefits of a UGME Indigenous health course, potential risks of such a course, critical curricular content to include, and considerations in design and implementation. The findings emphasized the need for such a course to be thoughtfully considered in order to appropriately address local cultural context, avoid reinforcing harmful discourses, and avoid exploiting Indigenous knowledge and traditional practices.

Discussion: The implementation of Call #24 will better prepare medical students to provide culturally sensitive care to Indigenous patients while decreasing prejudice, stereotyping, and racism in the healthcare system. Course content, delivery, and assessment must be determined through the consultation of experts (Indigenous Elders, knowledge keepers, healers, physicians, etc). Implementing this call at Canadian medical schools progresses the ongoing movement of reconciliation among Indigenous and non-Indigenous people in Canada.

OE-4-2 Revealing the Social: How Medical Trainees Use Peer Networks in Clinical Decision Making

Matthew Clifford-Rashotte, McMaster University

Background/Purpose: The literature exploring how and why medical residents seek help in the workplace has alluded to the influence of peers, but has largely situated itself in the dyadic relationship between resident and supervisor. We sought to gain a deeper theoretical understanding of how and why trainees sought advice from peers in clinical situations, as opposed to other available resources, including their supervisors.

Methods: We purposively sampled 10 residents in Internal Medicine at a Canadian medical school. Using a constructivist grounded theory approach, we conducted semi-structured interviews exploring how, when, and why trainees sought advice from peers in clinical situations. We iteratively collected and analyzed data using the constant comparative method.

Results: Peers were described as maintaining an environment of psychological safety, wherein asking potentially trivial questions would not be met with negative judgment. Residents were concerned that frequent help-seeking from their supervisors might engender questions about their competence or credibility, and preferred to ask peers when navigating uncertainty of a non-urgent nature. The non-hierarchical position of peers allowed residents to maintain agency when deciding whether to follow peer advice.

Discussion: Peer advice allows trainees to maintain agency and credibility while navigating uncertainty. Informal peer networks provide psychological safety at times when formal team structures might be perceived as psychologically unsafe. Our work highlights the interdependent ways in which trainees engage with and rely on one another for advice in clinical situations, suggesting that "independence" is nuanced by what might be a performative construct, mediated by covert social factors outside of the supervisor-trainee relationship.

OE-4-3 <u>Does BlackBox Explorer Technology improve</u> operative teaching for surgical residents?

Aradhana Tewari, St. Michael's Hospital- Unity Health Toronto

Background/Purpose: Video review has been shown to assist with the acquisition of operative technical skills, however, it can be time-consuming for both trainees and staff. Artificial intelligence (AI) scoring of video performances may lighten staff surgeons' load in operative teaching and assessment. We examined surgical trainees' perspectives on the value of the BlackBox Explorer's (BBX) automated, AI-algorithm, video-based operative teaching and assessment system.

Methods: Surgical residents and fellows rotating at the Humber River Hospital, Toronto, were randomized into two groups. Each group used the BBX and the institutional video-recording platform, in opposite sequences during their rotation. Our primary data included semi-structured interviews that were analyzed using a constant comparative approach.

Results: Our analyses of 14 interviews revealed that participants judged the BBX's utility as restricted; its utility was contingent on whether it facilitated self-directed utilization and self-regulated learning (SRL) via interpretable assessment data (e.g., AI scores). Participants described inconsistent institutional support, lack of integration into the formal curriculum, and rare instances of interdisciplinary collaboration regarding the best use of the system.

Discussion: The results illustrated that the trainees found the BBX promoted their SRL infrequently. While trainees felt that the system has clear potential, they also identified technical and systems barriers that must be addressed to effectively integrate the BBX into surgical curricula. Siloed implementation breeds inconsistent utilization. Our findings show no matter how beneficial an Al-based, automated assessment system may be, the human touch of effective integration into busy curricula remains a key challenge for surgical educators and leaders alike.

OE-4-4 In the Blink of an Eye: Measuring Expertise in Visual Diagnosis

Sandra Monteiro, McMaster University

Background/Purpose: Several retrospective studies have linked diagnostic error to premature closure. Accordingly, there is increased attention to promoting generalized self-directed strategies, such as taking more time to analyze. These recommendations often overlook the influence of experience, which can determine the effectiveness of self-directed reflection.

Methods: In two studies we examined the influence of experience, and viewing time, on identification of normal / abnormal and diagnostic accuracy of CXRs and ECGs. Study 1 restricted viewing times to less than 1 sec., to encourage rapid and unconscious processing. Study 2 extended viewing times to as much as 20 sec. to allow time for analytic reasoning. In both studies, the true and false positive rate was examined for each group at each of the viewing times.

Results: In Study 1, there were non-significant differences between staff and residents in ability to detect abnormality in CXR and ECG. Increased viewing time did not improve sensitivity for abnormality. In Study 2, there was a small rise in TP rate from 1 to 5 sec, followed by a levelling off, for both residents and staff. Critically, residents showed a consistent increase in FP rate with viewing time, from 15% to 33% with CXR and 17% to 35% with ECG.

Discussion: Increased viewing time, and consequently increased use of analytic processing, resulted in a decrease of performance for residents, reflected by increased false positive rates. The increased rate of false positives from residents may reflect an inadequate exposure to variants of normal images compared to their exposure to abnormal images.

OE-4-5 <u>Designing Learning-by-Concordance Clinical</u> Reasoning Cases: Lessons for Health Sciences Educators

Nicolas Fernandez, Université de Montréal

Background/Purpose: Learning-by-concordance (LbC) is an online learning strategy to practice reasoning skills in clinical situations. Writing LbC clinical cases, comprising an initial hypothesis and supplementary data, differs from typical instructional design. We sought to gain a deeper understanding from experienced LbC designers to better support clinician educators' broader uptake of LbC.

Methods: A dialogic action research approach was selected because it yields triangulated data from a heterogeneous group. We conducted three 90-minute dialogue-group sessions with eight clinical educators. Discussions focused on the challenges and pitfalls of each LbC design stage described in the literature. Recordings were transcribed and analyzed thematically.

Results: We found three themes about designing LbC. We were surprised to find that LbC designers clearly distinguished between pedagogical intent and learning outcome. Teachers intending that their students reflect on a complex topic is different than expecting them to acquire predetermined knowledge and skills. Also, LbC designers use contextual cues from their own experience to challenge formalized procedures. Finally, we observed that LbC designers routinely integrated experiential with formalized knowledge as a form of cognitive apprenticeship.

Discussion: The LbC designers in our study recognize that many clinical situations can be experienced and conceptualized in many ways, and multiple responses are appropriate. They identified the importance of developing the skills required to reflect and make decisions within grey areas of practice as the principal reason to choose LbC. Because LbC calls upon greater integration of experiential and formalized knowledge, it may question classical instructional design approaches.

OE-5

Inclusive Leadership

OE-5-1 <u>Programme accompagnement leadership (PAL): a</u> community of practice for faculty leaders

Julie Desmeules, Université de Montréal

Background/Purpose: The "Programme accompagnement leadership" (Leadership support program) is an educational activity developed for family medicine academic leaders. The retirement of numerous experienced professors has resulted in medical educators taking on leadership roles very early in their careers, making supporting and training the next generation of leaders an important part of our mission.

Methods: Our project incorporates social learning theory, longitudinal continuing professional development, and continuous quality improvement principles to help participants develop their leadership skills and to create and support their professional identity as medical educators as well as strengthening group cohesion. The program consists of six themed group meetings (2 hours each). The themes vary and include "Inclusive leadership" and "Strategic planning". Participants complete a preparatory document prior to each activity. During the meetings, participants share their issues and challenges, receive feedback from the group, and set objectives and action plans.

Results: We measured marked improvement in participants' comfort level regarding their role as medical leaders and in their ability to mobilize team members. "Learning how to delegate", "setting aside time for administrative tasks" and "naming expectations more clearly" were examples of acquired competencies. We will have more data to present in April 2024 following our last meeting.

Discussion: The objective of this program is to improve the quality of the administrative and academic leadership within our department. By fostering a sense of belonging, sharing sound management practices, and promoting a shared vision of continuous quality improvement for our leaders we hope to ensure the continuity of excellence in our department.

OE-5-2 <u>Inclusive Leadership: Empowering Tomorrow's</u> Healthcare Leaders Through Classroom Strategies

Patricia Gerber, University of British Columbia

Background/Purpose: Inclusive leadership (IL) is of fundamental value in today's workplace. It involves leading a diverse group with empathy and impartiality, valuing individuals' uniqueness while embracing divergent perspectives. Developing the next cadre of healthcare leaders who embody inclusivity is key.

Methods: To foster such leadership qualities, I implemented a series of learning activities and pedagogical strategies that included multi-perspective deliberative dialogues about IL within a leadership class in an undergraduate pharmacy program. Some activities involved facilitation by pharmacists from marginalized populations and senior pharmacy students who had previously completed the course. Following a series of meetings and "deliberative dialogues" with guest facilitators to share perspectives about and examine complexities of IL, activities implemented in the classroom included explorations of diversity and inclusion, challenges of free expression co-existing with diversity, leading with inclusivity, safe vs. brave spaces, intended/unintended outcomes of workplace inclusivity, and leading inclusive meetings.

Results: After the session, students completed a reflection assignment and delivered presentations that revealed expansion in their awareness and perspectives about these topics. This initiative holds relevance to academics in health professions programs, as it addresses the importance of graduating professionals who can exemplify and advocate for inclusivity. In this presentation I will describe the merits of fostering inclusivity in a classroom of tomorrow's healthcare leaders, examine the challenges and opportunities of cultivating safety and bravery, share my experience, and propose strategies to enhance student understanding of inclusivity in the workplace and in leadership roles.

OE-5-3 National Consortium for Indigenous Medcial Education (NCIME) Indigenous Faculty Recruitment and Retention Working Group: Leadership Development Program

Alexandra Nychuk, National Consortium for Indigneous Medical Education

Background/Purpose: The Truth and Reconciliation Commission's (TRC) 23rd Call to Action calls for both the need for, and retention of, Indigenous healthcare providers. The National Consortium for Indigenous Medical Education (NCIME) Indigenous Recruitment and Retention Working Group (RRWG) was established to address these gaps. Since the release of the TRC Calls to Action in 2015 there has been an increase of new leadership positions with specific portfolios seeking to address racism, inequity and the TRC within medicine across Canada. Indigenous physicians taking on these roles report inadequate leadership development opportunities, and that mainstream leadership development programs do not address the unique realities of Indigenous peoples working within medical and academic institutions.

Methods: The RRWG consists of 11 members who hold various positions as stakeholders in Indigenous medical education and academia using their experience and expertise to create a leadership program that fills the palpable gap for early and mid-career Indigenous physicians.

Results: The design of a 12-module hybrid leadership program that incorporates land-based learning, CanMEDs, and a reciprocal mentorship model using the LEADS in a Caring Environment Framework as the program's foundation.

Discussion: This leadership program is the first of its kind in Canada. Medical education in Canada and abroad continue to strive to increase diversity within their programs, they must also consider longitudinal supports needed to support the unique needs of emerging equity deserving physicians. The NCIME's leadership program design serves as a potential framework approach to this growing need.

OE-5-4 Inclusive Governance in a Faculty of Medicine – a qualitative assessment of current leaders' perceptions of Faculty governance in a large Canadian medical school: We Know We Need to Do Governance Differently – But We Don't Know How to Do It

Aleem Bharwani, University of Calgary

Background/Purpose: Universities have been confronted with social movements, including #metoo, #BlackLivesMatter,

#MissingMurderedIndigenousWomen, and #TruthAndReconciliation and are now compelled to address concerns that these communities have been articulating for years. Despite incremental revisions in institutional policy, there is a call for comprehensive, systemic change that moves beyond tokenistic, surfacelevel modifications. This includes calls for Indigenous selfgovernance and re-structuring systems that perpetuate inequities for Charter-protected and underserved communities.

Methods: We conducted 35 semi-structured interviews with Faculty leaders (decanal members, department heads, institute directors) at a large Canadian medical school over Zoom for an hour each; one was conducted over email; and one participant withdrew (interview was not coded). We interpreted data using an inductive, thematic content analysis.

Results: Leaders described the benefits (single voice; nimble; familiar; efficient) and gaps (relationality gap; accountability gap; slow change) of the current model, and pain-points preventing system transformation (dry diversity pipeline; leader confidence and creativity gaps; need for scalable solutions). They also highlighted desired governance transformations to dismantle structural inequities, including Indigenous and non-Indigenous parallel paths; enduring structures to include diverse voices; capacity in Indigenous Engagement and in Equity, Diversity, and Inclusion; consensus decision-making; understanding shared values; and reflective questions for leaders).

Discussion: Faculty leaders lack confidence, creativity, and diversity to imagine and execute new, inclusive models of governance – yet proposed compelling suggestions for a new model of inclusive governance in a university Faculty which would include a commitment to Indigenous sovereignty, a shift to relationality characterized by consensus and enshrined mechanisms to incorporate communities' diversity of thought and worldviews.

OE-5-5 <u>The physician-patient and doctor's-doctor:</u> Redrawing the boundaries of care

Andrea Gingerich, University of Northern British Columbia

Background/Purpose: Physicians will inevitably need to provide care to--and receive care from—physician colleagues. Not only do our programs provide graduates with little formal guidance on how to do this well, our professional bodies warn that it is problematic to engage in such dual role relationships. Despite recognition that role clarification is critical for boundary setting when doctoring doctors, there is little empirical evidence to guide navigating multiple roles when entering a doctor-patient relationship with a physician colleague.

Methods: We are interviewing up to 30 family medicine and internal medicine physicians who practice in Toronto and asking them how they navigate providing or receiving care with physician colleagues. Following constructivist grounded theory methodology, data collection is iterative with analysis.

Results: We have interviewed 8 participants to date. Preliminary analysis highlights how 1) Providing care to a physician-patient, especially one with a similar scope of practice, troubles the notion of doctor as expert, 2) Treating an "insider" exposes inefficiencies of our bureaucracies, and 3) Embracing the patient role is complicated by their lived experience in the doctor role. These complexities behoove unconventional arrangements and interactions including various professional courtesies. Thus, some physicians restricted themselves from treating colleagues and seemed to limit their own access to care.

Discussion: We will share our insights into doctoring doctors and being a physician-patient to initiate conversations on what could or should be done to provide compassionate care to colleagues, to inform professional boundary curricula, and to better prepare graduates for navigating multiple roles.

OE-6

Curriculum - Black Health and Wellness

OE-6-1 Survey of Canadian Medical Schools Addressing Anti-Black Racism: Black Medical Students' Association of Canada Short-Term Recommendations

Julianah Oguntala, University of Toronto

Background/Purpose: In 2020, the Black Medical Students' Association of Canada (BMSAC) released recommendations to the 17 Canadian Faculties of Medicine (CFoM) on Admissions, Curriculum and Accountability. The BMSAC recognized the discordance in how Black medical learners are supported and Anti-Black Racism (ABR) is addressed across the country. Therefore, a comprehensive environmental scan was undertaken to discover progress made in response to the 2020 recommendations and identify gaps that exist.

Methods: The survey, developed by the BMSAC and NABL and facilitated by the AFMC EDI-AR Committee, included multiple-choice and short answer questions. It was completed by the CFoM in collaboration with their Black Health and EDI leaders. Categorical responses were converted to alphanumeric grading scores (A-F with corresponding 0-100%), followed by a colorimetric system.

Results: All 17 CFoM completed the survey and the results of the short-term recommendations are presented. Overall, 82% of schools achieved a green rating (80-100%), 6% a yellow rating (50-79%) and 12% a red rating (0-49%). The first recommendation called for a public statement denouncing ABR and its various manifestations in Canada. While most schools made a public statement in 2020, some Faculties addressed racism without specifically addressing ABR. Schools that scored highly committed to prioritizing justice and connected with local and national Black-led medical organizations including the BMSAC.

Discussion: A majority of schools heeded the short-term Calls to Actions in a timely manner, denouncing anti-Black racism and reviewing/implementing institutional policies to address it in medical education. This is however, not a one time process, but an iterative one.

OE-6-3 From Slow Shifts to Fast Flips: Unraveling problembased learning group function dynamics

Matthew Mellon, McMaster University

Background/Purpose: The effectiveness of problem-based learning (PBL) is often attributed to group function dynamics but the factors influencing group function evolution are poorly understood. This study aims to explore how PBL group function changes over time to better understand the factors that give rise to high-functioning groups.

Methods: We examined time-function graphs of group function and conducted semi-structured focus groups with medical students enrolled in a PBL curriculum. Students reflected on their experiences in four different PBL groups, creating time-function graphs to characterize evolution of group function over 8–12-week periods. We analyzed graphs and transcripts in a staged approach using qualitative description and direct content analysis, sensitized by three frameworks: Tuckman's Stages of Group Development, the Input-Process-Output Model, and the Dimensions of PBL Group Function.

Results: Three archetypes of PBL group function evolution were identified: 1) Slow Shifters underwent an extended pattern of growth consistent with Tuckman's model, typically occurring amongst inexperienced groups faced with a novel task; 2) Fast Flippers underwent abrupt state changes in group function arising from internal or external disruptions; 3) Coasters underwent plateaus, where maintenance of group function was a frequently cited challenge. Abrupt changes and plateaus occurred more among mature groups with significant PBL experience.

Discussion: PBL group function varies over time in 3 different patterns. Classic Tuckman's stages are apparent among inexperienced groups, or groups facing novel tasks, whereas experienced groups often face abrupt change or plateaus. PBL educators and students should consider the need for novelty and disruption in more experienced groups to incite growth.

OE-6-4 <u>Postgraduate medical education Associate Dean's</u> perspectives of competency-based medical education in Canada

Karen Schultz, Queen's University

Background/Purpose: Postgraduate medical education (PGME) Associate Deans have been immersed in the implementation of competency-based medical education (CBME). They provide unique perspectives related to implementation at their institution. Thus, the purpose of this research study was to describe PGME Associate Dean's perspectives of CBME implementation at individual institutions.

Methods: All 17 postgraduate medical education Associate Deans in Canada participated in semi-structured interviews which were conducted virtually between June and August 2023. All interviews were audio recorded and transcribed verbatim. The transcripts were analyzed thematically.

Results: Six themes emerged from the data. The Associate Deans described, their ideal CBME implementation and enacted implementation at their institution. implementation challenges, what has been working well, the synergies between the national colleges, and the top priorities required to move CBME forward. When describing the ideal implementation, many participants described the high functioning decision-making processes, the organization around competencies, and the program of assessment. Common challenges included the work burden, direct observation, lack of a shared understanding and language, and measuring outcomes. The synergies between the national colleges included increased observation and group decision making whereas challenges included technology limitations and funding. Priorities involved learner development, targeted support for programs in difficulty, clarity around the next version of CBME (CBME 2.0), and decreasing the focus on EPA assessments.

Discussion: These findings highlight some aspects of CBME that are operating as intended while showcasing opportunities for growth. The participants provided insider perspectives and reiterated the need for greater clarity and common understanding specific to CBME 2.0.

OE-6-5 <u>L'enseignement de l'anatomie autrement :</u> <u>l'échographie ciblée au sein d'un nouveau curriculum</u> d'études médicales prédoctorales

Geneviève Goulet, Université de Sherbrooke

Background/Purpose: Avec l'importance croissante de l'utilisation de l'échographie ciblée en pratique clinique, l'intégration de cette modalité dans l'enseignement prédoctoral en médecine est en expansion. L'Université de Sherbrooke a implanté un curriculum longitudinal d'échographie ciblée dans son programme de médecine en lien avec l'apprentissage de l'anatomie et la physiologie. L'enseignement est réalisé sous forme de classe inversée en petits groupes pendant les quatre années du programme.

Methods: L'évaluation de cette innovation pédagogique a été faite à l'aide de deux courts questionnaires qui furent soumis aux 190 étudiants finissants de la promotion 2023. La rétention des connaissances anatomiques des étudiants et leur perception de la contribution académique du curriculum ont été évaluées.

Results: Avec un taux de réponse de 54%, plus de 95% des étudiants sont d'avis que les séances d'échographie leur ont permis de consolider leurs notions d'anatomie et qu'elles ont facilité l'établissement de liens entre les notions anatomiques et les différentes présentations cliniques. Le test de connaissance fut réussi avec une moyenne de 91%. L'implication des résidents, la multidisciplinarité des enseignants et la grande appréciation de la formule pédagogique furent relevées comme des forces du programme. L'ajout de temps de pratique et d'examens formatifs ont été soulevés comme améliorations potentielles.

Discussion: Ces résultats suggèrent que l'ajout du curriculum d'échographie ciblée contribue à l'apprentissage des notions d'anatomie et de physiologie. L'intégration de l'échographie ciblée comme outil pédagogique semble ainsi graduellement trouver sa pertinence au sein des programmes prédoctoraux.

OE-7

Melange

OE-7-1 Providing care in unrecognized ways: perspectives of clinic operations staff on interprofessional collaboration in primary care

Victoria Hayrabedian, University of Toronto

Background/Purpose: Clinic operations staff fulfill important roles on primary care teams handling administrative work that enables patient care. Despite their essential role to the system of primary care, little is known about the perspectives of clinic operations staff on interprofessional collaboration and strategies to improve it within teams.

Methods: We explored clinic operations staff's perceptions of interprofessional collaboration using a constructivist grounded theory approach. Semi-structured interviews were conducted with 14 clinic operations staff from primary care settings, including medical office assistants, unit clerks, medical secretaries, administrative staff, clerical staff, clinical support staff, and managers. Data collection and analysis was iterative, and themes were identified using constant comparative analysis.

Results: The core category of social process emerging from our research is called 'providing care in unrecognized ways.' The findings suggest that as clinic operations team members provide direct patient care, they face significant challenges in their efforts, including balancing patient and provider needs and navigating complex power dynamics. Our participants emphasized the importance of explicitly recognizing their unique insights into patient needs as critical primary care team members, especially in cases where they have shared lived experiences with patients.

Discussion: Clinic operations staff are more engaged in direct patient care than previously recognized. Including their perspectives can enhance patient care and reinforce collaborative efforts toward a better primary care system. A deeper understanding of their unique insights may lead to improvements in the inclusiveness and robustness of interprofessional collaboration teaching and research.

OE-7-2 Even as medical students, we hold a lot of power over sustainability initiatives that occur at our hospital":

The facilitators and barriers of medical student-led sustainability quality improvement projects

Owen Luo, McGill University

Background/Purpose: There is an urgent need for low-carbon, environmentally-sustainable healthcare systems in a climate crisis. Despite the growing interest of medical students in climate action, there is a lack of trainee opportunities to advance healthcare sustainability. Project Green Healthcare/ Projet Vert la Santé (PGH/PVLS) is a national community of practice that enables medical student-led healthcare sustainability projects by providing medical student teams with seed funding and partnership with mentors in healthcare leadership.

Methods: PGH/PVLS teams submitted progress reports every 6 months to report on their initiatives. Progress reports from 16 PGH/PVLS teams from 14 Canadian medical schools from 2020-2023 were thematically analyzed to determine common facilitators, barriers and learning outcomes to medical student-led healthcare sustainability projects.

Results: A total of 79 medical students launched healthcare sustainability projects at 16 Canadian healthcare institutions in partnership with 93 physicians, 32 healthcare administrators, and 18 interdisciplinary PGH/PVLS participants professionals. identified facilitators including the community of practice of medical students with shared passions in sustainability and partnerships with supportive clinical and non-clinical partners. Common barriers reported by participants included challenges balancing their learning responsibilities with their initiatives, difficulties navigating the complex healthcare system as trainees, and the lack of prioritization of healthcare sustainability by healthcare leadership. Medical student participants found that the PGH/PVLS program strengthened their skillset in sustainability quality improvement, and encouraged them to be healthcare sustainability leaders throughout their careers.

Discussion: The PGH/PVLS program represents an innovative approach to provide healthcare trainees with experiential-learning opportunities in healthcare sustainability leadership and quality improvement.

OE-7-3 <u>The Climate Wise slides: An evaluation of planetary</u> health lecture slides for medical education

Owen Luo, McGill University

Background/Purpose: There is an urgent need for innovations in planetary health medical education to prepare future physicians to care for patients increasingly impacted by the health consequences of climate change and to practice high-value, low-carbon healthcare. However, barriers to planetary health medical education implementation include competing demands from other curricular content and lack of faculty expertise. We describe the evaluation of the Climate Wise slides, a set of open-access, evidence-based slides organized by medical subspecialty that integrate planetary health into existing medical curricula and can be presented by faculty regardless of their expertise in planetary health.

Methods: The Climate Wise slides were evaluated by a virtual lecture session that presented a subset of the slides with content spanning the medical subspecialties to N=75 Canadian medical students. Each participant completed a questionnaire before and after the Climate Wise virtual lecture that included multiple choice questions to assess their planetary health knowledge (maximum score of 16) and a rating of their interest in including the Climate Wise slides in medical curricula (Likert scale from 1 to 5).

Results: Participants showed significantly improved planetary health knowledge scores (10.48 vs. 8.88; p<0.0001) and increased interest in including the Climate Wise slides in medical curricula (4.68 vs. 4.35; p<0.001) after the virtual Climate Wise lecture session.

Discussion: This study demonstrates that the Climate Wise slides are a valuable pedagogical tool to advance planetary health medical education. Future directions include evaluating faculty perspectives on the Climate Wise slides and incorporating the slides into medical curricula across Canada.

OE-7-4 Mapping the Population Health Impacts of Community-Campus Engagement in Ottawa and Thunder Bay

Claire Kendall, Bruyère Research Institute

Background/Purpose: With medical schools intensifying their commitment to Community-Campus Engagement (CCE) to address community health needs and uphold social accountability, understanding CCE's impact on population health becomes increasingly crucial for informed decision-making, optimizing partnerships, and ensuring meaningful health benefits. Despite growing investment and commitment, traditional evaluation methods, primarily based on attribution, often miss the nuances and intricacies of CCE. Our research aims to provide robust evidence of CCE's effects on population health in Ottawa and Thunder Bay.

Methods: This study utilizes Contribution Analysis, an innovative theory-based evaluative framework, to achieve its objective. The research involves a three-stage process: i) mapping CCE-health outcome pathways with key stakeholders; ii) analyzing data from 30 CCE initiatives using mixed methods such as 'story of change' interviews, documentation reviews, and health data analysis; and iii) refining these pathways based on empirical findings.

Results: We anticipate completing the first stage by March 2024. Our findings will detail the co-created mapping between CCE and population health, highlighting the tools, methods, and challenges faced. A brief outline of the next steps will also be shared.

Discussion: Contribution Analysis is instrumental in understanding the complex effects of CCE. Our upcoming findings will underscore the value of collaborative mapping with stakeholders, emphasizing the role of cocreation in gauging CCE's impact on population health. The challenges and insights from our initial phase will provide clear direction for future evaluations in similar areas.

OE-7-5 <u>Beyond the Blind Date: Re-conceptualizing</u> mentorship matching programs

Alexandra Manning, Dalhousie University

Background/Purpose: Mentoring is increasingly being discussed as an important part of medical training programs. In 2021, the Canadian Academy of Child and Adolescent Psychiatry (CACAP) began the process of designing and implementing a mentorship program to meet the needs of its members. This was initiated through the member-in-training representative, with the desire to increase engagement of members-in-training within the organization.

Methods: A needs assessment survey was constructed in an iterative process with the CACAP Board and distributed to its membership in Winter 2022. This was followed by a mentorship symposium at the CACAP Conference in Fall 2023.

Results: Survey results suggested: (1) a breadth of perceived benefits to mentorship across the physician lifespan, (2) a desire to provide and receive mentorship across the physician lifespan and (3) a desire for CACAP to match prospective mentors with prospective mentees. The mentorship symposium identified innovative ways for CACAP to develop mentorship matching programs, including development of profiles, special interest groups, task-focused projects, and an emeritus group.

Discussion: Mentorship is desired among child and adolescent psychiatrists at all levels of practice. There is an ongoing desire that organizations provide matching services for those that seek to receive and provide mentorship. While the literature suggests that matching mentor relationships are less beneficial than organic mentoring relationships, there continues to be a desire for matching. Our approach has been to develop innovative ways to reconceptualize how to provide structured pairing of members, while emphasizing a culture that promotes the natural formation of mentoring relationships.

Block F

OF-1

Patient Partners

OF-1-1 <u>Co-production in medical education and research:</u> A Canadian case example

Sophie Soklaridis, Centre for Addiction and Mental Health

Background/Purpose: Co-production in healthcare is a process wherein people with lived experience (PWLE) of health system encounters work as experts alongside people with professional/academic expertise in the design and actualization of services, education, and research. We present a Canadian case example that delineates how a health education research team embodied patient-oriented research principles through co-production. We contend that co-producing medical education and research is necessary for impactful outcomes, ethical engagement, and equity and inclusion.

Methods: Our co-production process unfolded during a participatory action research project on co-produced mental health education programs. This project involves the meaningful engagement of PWLE, researchers, and administrators as co-investigators. We will share how our team fostered inclusivity, navigated challenges, and lessons learned.

Results: We identified four key principles of our coproduction process: 1. Power sharing: In contrast to traditional power structures, we employed distributive leadership approaches. 2. Multi-directional learning: Team members simultaneously assumed the roles of teacher and learner, co-creating new knowledge integrating diverse perspectives. 3. Connection through vulnerability: We centred lived experience and openly expressed vulnerability. 4. Slow and steady wins the race: We embraced flexibility and allowed time for processes, structures, and relationships to develop.

Discussion: This project provides important insights into how co-producing medical education research can enhance its value and impact. In addition to developing valuable connections, we have published five peer-reviewed manuscripts (with three forthcoming), produced arts-based outputs, and presented and won awards at national and international conferences. For those aspiring to work productively and humanistically, we will offer practical strategies and learnings.

OF-1-2 <u>Civic Patienthood</u>: A sociological theory of patient engagement in research

Graham Macdonald, University of British Columbia

Background/Purpose: Patient engagement is recognized as an important approach in health professional education (HPE) research . Although still marginalized in HPE research, patient experience and patient perspectives promises to stimulate democratic reform that redistributes power in the research process. This abstract reports on a dissertation exploring the real-world processes of how the patient perspective in research is socially constructed. This work responds to the call from HPE research for a deeper theorization of the patient perspective in research (Rowland et al. 2017, Ellaway 2021).

Methods: We employed a critical grounded theory methodology, staged in three studies. The first study examined the experiences of arthritis patients involved in a research advisory board. The second sampled key informants (patient partners, researchers, administrators) from two networks dealing with chronic kidney disease and bipolar disorder, respectively. Our third study used critical theory to develop a conceptual heuristic to understand patient experience and perspective.

Results: We found that "patient experience" is a multifaceted phenomenon that goes beyond the realm of clinical medicine. We distinguished between nuanced forms of power relations that shape patient experience and perspective. We identified four categories of patienthood (clinical, civic, consumer, and skeptical) characterized by varying relationships to power and authority.

Discussion: Patients' narratives in their rehabilitation often reach beyond their own personal challenges to encompass societal problems. This work offers driving concepts for HPE researchers that can help guide the building of institutions and infrastructure of patient engagement in research supporting meaningful reform and equitable involvement.

OF-1-3 "Access to Healthcare is a Human Right": A constructivist study exploring the impact and potential of a hospital-community partnered COVID-19 Community Response Team for Toronto Homeless Services and Congregate Living Settings

Vivetha Thambinathan, Western University

Background/Purpose: Individuals experiencing homelessness face unique physical and mental health challenges, increased morbidity and premature mortality. In Canada, it is estimated that 235,000 individuals experience homelessness annually, and 180,000 use emergency shelters each night. COVID -19 creates a significant heightened risk for those living in congregate sheltering spaces. In March 2020, the COVID-19 Community Response Team (CRT) was formed by a group of health care providers at Women's College Hospital (WCH), whose goal was to support 14 identified Toronto shelters and congregate living sites to manage and prevent outbreaks of SARS-CoV-2 using a collaborative model through onsite mobile testing, vaccination, and supporting the management and prevention of outbreaks. This research seeks to evaluate the impact and importance of this partnership model and its future potential in communitycentered integrated care.

Methods: Constructivist grounded theory (CGT) is used in this project to explore perceptions and experiences of this partnership (Charmaz, 2017). Epistemically, we approach this research with a health equity orientation, understanding that we have a responsibility as health professionals to provide expanded support to under-resourced individuals within the healthcare system. Aligned with the CGT data analysis method developed by Charmaz (2006), this study approached data analysis through three stages: initial, focused, and theoretical. CGT data analysis revealed five main categories, 16 subcategories, and one core category.

Results: The core category is "access to healthcare is a human right; understand our communities". The main categories are COVID-19 response capacity, outbreak identification and management, barriers to the vaccine program, community-centred immediate shelter needs, and avenues for intersectoral relationship strengthening. (figure will be included when presenting)

Discussion: 1. 'Health as a human right' framework is an organizing principle in shelters but not necessarily in hospitals. How can hospitals adopt and integrate this framework at the policy level to operationalize an equity-based approach to care? 2. For hospitals, there are gaps in knowledge about community and shelter realities. Ongoing formal partnering between hospitals and communities is one way to bridge this gap. 3. Empowering shelter staff is crucial to the success of hospital-partnered programs and clinical interventions. Finally, this project calls attention to the urgent context-specific exploration needed to advance official hospital-community partnerships, where there is an everlasting commitment and accountability.

OF-1-4 Continuity of care during transition to long-term care: A critical interpretive synthesis

Augustine Okoh, McMaster University

Background/Purpose: The marked increase in the elderly population has profound implications for the care continuity system, especially the community/hospital to long-term care (LTC) transition. Most older adults lose contact with their family physicians when they enter LTC as new providers assume responsibility for their care. To ameliorate the disruption in the family physician-patient relationship during the transition to LTC, a comprehensive patient handover note is critical to ensure informational continuity that would support providing continuous, coherent, and appropriate care for the LTC residents. In Ontario, family physicians often send important healthcare information to the LTC home during the patient's transition to ensure informational continuity, but the utility of this communication is under-researched.

Methods: This project employs critical interpretive synthesis methodology (Dixon-Woods et al. 2006) to develop an analytic framework that describes the perceptions, factors, knowledge gaps, and education antecedents that influence informational continuity during transitions to LTC. Our review is informed by the Transitions Theory (Meleis et al., 2010).

Results: Our findings confirm that instances of relational continuity are very few during LTC transitions. Family physicians in rural practice are more likely to continue providing care to their patients after admission to LTC. The review also highlights that informational continuity during the LTC transition remains under-researched.

Discussion: This work suggests that health professions education that better attunes new professionals to the information that best supports LTC providers can be leveraged to improve continuity during transitions. However, it also highlights that education is insufficient without improved communication tools, processes, and policies.

OF-1-5 Evaluation of a Learner Patient Safety Incident Discussion Tool

Margarita Lam Antoniades, University of Toronto

Background/Purpose: Patient safety (PS) is increasingly recognized as a vital component of medical practice, however, PS teaching is not meeting the standards and expectations of educators and regulatory bodies in Canada and internationally. This study aimed to evaluate the implementation of a Resident Patient Safety Discussion Tool in the ambulatory family medicine context.

Methods: Questionnaires and focus groups were used with family medicine residents and faculty at Unity Health Toronto, with ethics board approval. Participants were asked if, how and why the tool was acceptable and usable and what its perceived value was. Qualitative data from focus groups were transcribed, de-identified and analyzed iteratively using descriptive thematic coding

Results: Eight faculty members and twenty-one residents responded to the questionnaire. Focus groups were conducted with twenty-one residents and faculty. The tool was reported to be acceptable and usable. It was found to provide a useful structure for discussions around PS incidents. In prompting consideration of systems factors it promoted a psychologically safe environment and helped residents move beyond guilt and shame to learning.

Discussion: The Resident Patient Safety Incident Analysis Tool is a concise, practical tool that can facilitate learning from residents' immediate personal experiences with safety events. This study demonstrates that it is an acceptable and useful tool, which can help facilitate a safe psychological environment to promote patient safety learning in the ambulatory family medicine setting. The tool could be used in other clinical settings both ambulatory and inpatient.

OF-2

Virtual Clinical Medical Education

OF-2-1 An online clinical reasoning simulator for medical students: results of an international multicentre pilot

Eduardo Pleguezuelos, Practicum Foundation - Institute of Applied Research in Health Sciences Education

Background/Purpose: The development of effective approaches for training and assessing clinical reasoning, under conditions of uncertainty, remains a great challenge within medical education. This study aimed to investigate the psychometric properties and acceptability of the simulation-based program Practicum Script (PS), grounded on the dual process theory, as a clinical reasoning training methodology, in undergraduate teaching and assessment.

Methods: We piloted the use of PS with 2457 final-year medical students from 21 schools across Europe, USA and Latin America, using 20 internal medicine real-life cases (see methodology here: https://vimeo.com/859058025). Classical estimates of reliability for three test domains (hypothesis generation, hypothesis argumentation and knowledge application) and the full test were calculated using Cronbach's alpha and McDonald's omega coefficients. Validity evidence was obtained by confirmatory factor analysis (CFA) and measurement alignment (MA). Items from the knowledge application (KA) domain were analysed using cognitive diagnostic modelling (CDM). Acceptability was evaluated by an anonymous student survey.

Results: 1502/2457 (61%) volunteer students completed all cases. 89,8% of responders to the survey rated the experience as "excellent" or "good". The reliability estimates for the three domains and the full test were high with narrow confidence intervals (full test: alpha = 0.93, 95% CI = 0.92-0.93; ω =0.94, CI: 0.94 – 0.95). CFA revealed acceptable goodness-of-fit indices for the proposed three-factor model. CDM analysis of KA items resulted in good absolute test fit and high classification accuracy estimates.

Discussion: Our findings suggest that PS is a valuable resource to help students strengthen their clinical reasoning skills with evidence of good reliability, validity and acceptability.

OF-2-2 <u>360-Degree Virtual Reality Video to Teach</u>
Neonatal Resuscitation: An Exploratory Development
Study.

Ahmed Moussa, Université de Montréal

Background/Purpose: In-person neonatal resuscitation (NR) simulation is being limited by human and material resources, and the ongoing repercussions of the COVID-19 pandemic. Immersive technologies are more accessible, namely virtual reality (VR) and 360° VR videos. In NR, a qualitative study of the use of 360° VR videos reported high level of acceptance and interest in the technology. Primary objectives of this study were to produce a high quality 360° VR video capturing NR and to determine if this video can be an acceptable adjunct to teaching NR. Secondary objective was to determine which aspects of NR could benefit from the incorporation of such a video in training.

Methods: This was an exploratory development study. First, we produced a video using a GoPro action camera, Adobe Premiere Pro, and Unity Editor. Second, participants were recruited to watch the video and answer questionnaires to determine acceptability and aspects of NR which could benefit from the video.

Results: The team successfully developed the video. 46 participants showed a strong general appreciation. The evaluation of user experience through a literature validated questionnaire revealed high means in the positive subscales and low means for immersion side effect, with no significant difference between groups. Cognitive load was higher than anticipated using the Paas Scale. Our home-made questionnaire revealed that this video could be effective for teaching crisis resource management principles, human and environment interactions, and procedural skills.

Discussion: This study shows that our 360° VR video could be a potential new simulation adjunct for the NR training program.

OF-2-3 <u>Virtual Psychomotor Skills Teaching: Skin and</u> Wound Care

Eleftherios Soleas, Queen's University

Background/Purpose: COVID-19 necessitated virtual education to ensure healthcare professionals access to skill development training. The Extension of Community Healthcare Outcomes (ECHO) Ontario Skin and Wound Care (SWC) project, is an innovative, interprofessional, pandemic-motivated pedagogy that utilizes interactive virtual sessions and video demonstrations of participant psychomotor skills development. Guided by adult learning theory, and the 11-steps of the teaching psychomotor skills model, this program includes 16 sessions and one optional boot camp.

Methods: The sessions and boot camp were evaluated using pre- and post-surveys. The boot camp evaluation also included expert assessments of participants' video recording themselves performing specific SWC skills. Data analysis included descriptive and inferential statistics and thematic analysis of the program's strengths and weaknesses, that were then mapped onto the 11-step teaching psychomotor skills model.

Results: The ECHO SWC program skills mapped onto 9 of the 11 teaching psychomotor skills steps. Nine steps included: task analysis and cognitive load awareness; identifying learner skill level and learning needs; pre-skill conceptualization; demonstration—visualization/verbalization; limit guidance and coaching; verbalization-execution/performance; and post skill-execution feedback. Two steps were not addressed in this program: immediate error correction and skill practice.

Discussion: This innovative interprofessional SWC educational program fulfills the virtual skills development promise. Each student that submitted videos was assessed as exceeding or meeting standard or needed improvement. This paradigm of virtual learning creates a refined method for developing wound care psychomotor skills that has implications for other settings where geographic, public health, or demographic barriers create inequitable accessibility opportunities.

OF-2-4 <u>Bite-sized Educational Resources and a Virtual</u>

Community of Practice to Engage Healthcare

Professionals and Students in Quality Improvement

Certina Ho, University of Toronto

Background/Purpose: Bite-sized educational content about quality improvement (QI) can be tailored to diverse learning styles of healthcare professionals (HCPs) and students. We aimed 1) to develop and evaluate educational resources for HCPs about QI concepts using infographics (Online Pocket Guide to QI; PGQI), video microlessons, and provide real-world examples of QI/leadership (Leading with Quality Podcast; LQP); 2) to engage HCPs/students by featuring the content in a virtual QI community of practice (CoP).

Methods: Development of educational resources involved consulting national/international resources for training HCPs on QI (PGQI, video microlessons) and interviewing guest speakers about their experiences with QI/leadership (LQP). Resources were featured on a virtual QI CoP. The PGQI and LQP were individually pilot-tested to a convenience sample of Canadian pharmacy professionals/students through online surveys based on Kirkpatrick's four-level training evaluation. We asked about perceived value, relevance, and knowledge gain after reviewing the PGQI or LQP.

Results: The PGQI, video microlessons, LQP and QI CoP have been developed. Survey respondents for both PGQI (n = 20) and LQP (n = 20) found the materials to be relevant and easy to understand, indicated improved knowledge on QI and/or leadership, and recommended the resources to other HCPs/students. PGQI respondents suggested more external resources, QI examples, and case scenarios, while LQP respondents suggested improving clarity by explaining concepts and jargon at the beginning of the episodes.

Discussion: Our bite-sized content (PGQI and LQP) will serve as resources to support a virtual QI CoP for HCPs/students for knowledge exchange, personal and professional development, and fostering leadership in QI.

OF-2-5 <u>Telehealth Clinical Learning: Understanding Pre</u>clerkship Medical Student Experiences

Meera Anand, University of British Columbia

Background/Purpose: With the advent of the COVID-19 pandemic, a reliance upon telehealth patient visits emerged. Many medical schools utilize early clinical experiences in the pre-clerkship years to provide opportunities to practice evolving clinical skills and cement classroom learning. However, little is known about the value of telehealth visits during the pre-clerkship years. Therefore, the purpose of the current study was to determine what student learning experiences were with telehealth patient encounters during early clinical experiences.

Methods: This qualitative study used a descriptive phenomenological approach. Medical students were interviewed using Zoom to gather their lived experiences. Key findings were grouped into themes.

Results: Seventeen medical students participated in the study. Key challenges that emerged included the loss of body language and visual cues leading to challenges with rapport building, the inability to perform physical examinations and less involvement and independent practice of skills. However, positive aspects include good opportunities for history taking and benefits to notetaking. Mentorship with preceptors remained either positive or similar to in-person experiences.

Discussion: Since telehealth remains an important part of healthcare, it is crucial to train learners in telehealth clinical environments alongside standard in-person environments. However, while both challenges and benefits exist with telehealth clinical visits for junior learners, active learning processes, the use of video augmentation and robust faculty development strategies remain important to increase the educational value of these visits.

OF-3

Equity, Diversity and Inclusion

OF-3-1 Making the Unseen Seen: Teaching Psychiatry Faculty About Identifying and Addressing Unconscious Bias

Shaheen Darani, University of Toronto

Background/Purpose: Creating more equitable settings is essential for education leaders. To address our faculty's need for knowledge and skills in addressing bias, we delivered an unconscious bias workshop in collaboration with a grassroots unit at our university focused on supporting EDI. Our goal was to provide unconscious bias training and foster a departmental culture shift — an essential element of advancing equity in academic medicine.

Methods: Workshop design was informed by the ADDIE (Analyze, Design, Develop, Implement, Evaluate) instructional design process following a literature and internal review to identify gaps and needs. To foster culture change and department-wide uptake, roll-out was initiated with leadership. Our evaluation was informed by the Kirkpatrick model; participants completed pre- and post-workshop surveys.

Results: Our unconscious bias program reached 607 faculty through the delivery of 14 sessions held between April 2021 and April 2023. The workshops were well-received [i.e., reaction/satisfaction]; participants reported increases in understanding of EDI concepts [i.e., learning/knowledge], comfort discussing and strategies to address EDI issues [i.e., skills]. Thematic analysis was applied to open-ended responses about what participants valued, potential improvements, and barriers, facilitators, and departmental support required to execute sustainable knowledge translation.

Discussion: This intervention demonstrates how leaders and educators can implement an equity-focused workshop that facilitates engagement and behavioural change in a large department. Key aspects to success included endorsement of leadership, didactic and interactive learning, and content that was accessible and grounded in literature. We anticipate results will help guide future faculty development in EDI to build capacity and empower faculty to effect cultural change.

OF-3-2 <u>"[We] need a seismic shift": Disabled student perspectives on disability inclusion in U.S. medical education</u>

Erene Stergiopoulos, University of Toronto

Background/Purpose: Students with disabilities have inequitable access to medical education, despite widespread attention to inclusion. While systemic barriers and their adverse effects on student performance are well-documented, few studies include students' first-person accounts. Existing first-person accounts are limited by small samples, and focus predominantly on students who used accommodations. This study bridged these gaps by analyzing a national dataset of medical students with disabilities to understand their perceptions of disability inclusion in U.S. medical education.

Methods: We conducted a reflexive thematic analysis of 674 open-text responses by students with disabilities from the 2019 and 2020 Association of American Medical Colleges Year 2 Questionnaire about their experiences with disability in medical school. We coded data using an inductive semantic approach to develop and refine themes. We interpreted themes using the political/relational model of disability.

Results: We identified key dimensions of the medical education system that influenced student experiences: program structure, processes, people, and culture. These dimensions informed the changes students perceived as possible to support their access to education and whether pursuing such change would be acceptable. In turn, students took action to navigate the system, using administrative, social, and internal mechanisms to manage disability.

Discussion: Key dimensions of medical school affect student experiences of disability inclusion, demonstrating the relational production of disability. Findings confirm earlier studies on disability inclusion, while adding depth to understand how and why students do not pursue accommodations. We identify resources to help medical schools remedy systemic deficits to improve their disability inclusion practice.

OF-3-3 Who feels like they "belong" in medical school? A national, mixed methods study of medical students across Canada

Allison Brown, University of Calgary

Background/Purpose: Despite ongoing efforts to prioritize equity, diversity, and inclusion, little is known regarding how learners from groups that face systemic oppression and exclusion experience the phenomenon of "belonging" during medical school.

Methods: We employed a sequential explanatory mixed methods design to explore how students from equity-deserving groups (EDGs) experience belonging during medical school, including those who are women, racialized, Indigenous, disabled, and 2SLGBTQIA+. In the first quantitative phase, we conducted a cross-sectional survey across a national sample of medical students in Canada (N=480). In the subsequent qualitative phase, we sampled and interviewed students from demographic groups identified as having significantly compromised belonging in phase 1 (N=16).

Results: Quantitative findings revealed how sense of belonging was significantly lower for medical students from EDGs compared to students from non-EDGs. Regression results showed that being racialized was a significant predictor of significantly low belonging scores [F(5,398)=2.461, p=.033, R=.173]. Structural equation modelling delineated a progression from compromised belonging to pronounced manifestations of imposter syndrome, subsequently exacerbating symptoms of burnout and depression. Qualitative insights underscored how feelings of acceptance, comfort, and safety were essential to belonging. However, pervasive experiences of "othering", informed by social identity disparities and structural privilege, obstructed sense of belonging, detrimentally affecting both student well-being and professional trajectories.

Discussion: This study accentuates the severe psychological and professional repercussions engendered by a diminished sense of belonging. A nuanced reconceptualization of equity, diversity, and inclusion, prioritizing the structural barriers thwarting authentic inclusion and belonging, remains paramount within academic medicine.

OF-3-4 Co-constructing equity, diversity, and inclusion learning modules alongside youth with lived experience: results from an initial pilot among child and adolescent psychiatry trainees

Nikhita Singhal, University of Toronto

Background/Purpose: The current social climate has brought attention to historic and systemic inequities impacting youth mental health. Despite this, equity, diversity, and inclusion (EDI) principles have not been a major component of Canadian child and adolescent psychiatry (CAP) training. We aim to address this gap by developing and evaluating a series of co-created, evidence-informed virtual educational modules focused on EDI themes relevant to CAP.

Methods: Grounded in Kern's six-step framework for curriculum development, our project comprises the following stages: (1) an environmental scan to better understand the current state of CAP EDI training (sampling program directors, current trainees, and recent graduates using online surveys and semi-structured follow-up interviews); (2) co-design of case-based online modules alongside youth with lived experience; and (3) module evaluation based on Kirkpatrick's four-level model.

Results: Our environmental scan indicated a significant gap in EDI training across programs and informed selection of module topics (cultural formulation, anti-Black racism, Indigenous mental health, LBGTQ+ populations, and refugee mental health). To date, two modules have been developed and the first (cultural formulation) was piloted among CAP residents across Canada. Seven participants completed pre- and postmodule guestionnaires and reported increased knowledge, confidence, and skills as well as intended changes to current practices, with retention demonstrated through 6 completed 3-month postmodule questionnaires.

Discussion: Evaluation outcomes from our pilot will inform iterative refinement and development of the remaining modules in the series. We anticipate this series may be adapted for broad applicability to enhance EDI training for a variety of medical specialties and interdisciplinary healthcare professional education.

OF-3-5 <u>Is it ok to ask?: The racial makeup of Canadian</u> Postgraduate Medical Trainees

Marck Mercado, McMaster University

Background/Purpose: Racial differentials in postgraduate medical training attainment have never been studied in Canada due to a lack of routine collection of race-based performance data. One barrier is the anxiety among institutions about the collection of this sensitive data. To address these, the McMaster Racialized Resident Mentorship (MRRM) Program was created. In Phase 1, we collected the most comprehensive race-based and sociodemographic dataset of post-graduate medical trainees in Canada.

Methods: The program comprises three phases: an acceptability study, program evaluation of the mentorship program and cross-sectional study of differential attainment amongst graduating family medicine residents. We will describe preliminary data for Phase 1 which included recruitment of trainees and faculty to the mentorship program and an e-survey of racial identity and socio-demographic measures, and acceptability of collecting these data.

Results: As of September 15, 2023, there was a 50.8% response rate to consent for the e-survey, representing 120 of the 236 postgraduate year 1 residents enrolled to begin residency training at McMaster. We will continue to collect and analyze data as the survey closes on September 30, 2023.

Discussion: This project represents the first investigation of race-based data in postgraduate medical training in Canada as part of the first mentorship program for racialized residents. It serves as a proof of concept regarding the acceptability of collecting race data and collects baseline data for the larger MRRM program evaluating the effectiveness of racialized mentorship program on training outcomes.

OF-4

Faculty Development

OF-4-1 <u>Developing a praxis of medical education research:</u>

<u>An autoethnographic account of gaining clinical</u>

experience

Christen Rachul, University of Manitoba

Background/Purpose: Developing a praxis of research – understood as informed action that in turn informs knowledge through reflection – can be challenging for non-clinician medical education scientists who are often disconnected from the practice contexts in which theory and research findings are applied. In this autoethnographic study, I explore how clinical experience helped to elucidate my theoretical knowledge and turn my research practice into praxis.

Methods: For my autoethnographic exploration, I relied on a corpus of documents produced during an 11-week intensive training course in clinical psychospiritual education (CPE) at a tertiary hospital. These documents include weekly in-depth reflection reports, weekly written analyses of patient interactions, and a mid-term and final self-assessment. I conducted a thematic analysis of these documents that focused on identifying and connecting my CPE experiences to my knowledge and experience as a medical education scientist.

Results: I identified 4 themes in my experiences that clarified and added to my theoretical knowledge related to medical education. The four themes include being an interdisciplinary healthcare team member, being a learner in a hospital, being a patient in a hospital, and being me in the hospital.

Discussion: For non-clinician medical education scientists, exposure to clinical experiences can be invaluable for developing a praxis that seeks to bridge the theory-practice gap. My experiences not only helped to clarify my theoretical knowledge, but they also shaped my subsequent approach to engaging in medical education research. Providing such experiences for early career researchers can contribute to successful careers and effective contributions to the field of medical education.

OF-4-2 <u>COACH</u> (Clinical Observation and Change Handbook): A Novel Faculty Development Initiative

Keegan D'Mello, Lawson Health Research Institute

Background/Purpose: Developing coaching skills among faculty in the era of competency-based medical education (CBME) is crucial. While the translation of coaching principles from other domains into medical education has progressed, the identification of effective faculty development programs is still evolving. Recognizing that most faculty lack firsthand experience being coached within medicine, we created a structured peer observation coaching program that allows faculty to personally experience these new paradigms.

Methods: Fourteen faculty from two Departments at McMaster University enrolled in the pilot program. A preprogram survey was distributed to assess participants' knowledge and comfort with coaching. Following program implementation, participants were invited to participate in one of two semi-structured group interviews. We used a descriptive qualitative analysis and conducted a thematic analysis using inductive coding to analyze the transcripts.

Results: 13/14 faculty completed the pre-survey. Six faculty participated in the group interviews. Barriers such as COVID-19 and scheduling logistics hindered the completion of the program for all participants. The themes centered around participants' preference for the peer-to-peer support structure of the program, highlighting its role as a facilitator for creating a safe space for reflection, direct observation, and targeted skill development. Additionally, themes relating to unintentional yet positive cultural messaging to both trainees and faculty was captured.

Discussion: Program modifications to overcome these barriers is important, as the peer-to-peer nature of the program has positive impacts both on individuals and on fostering a coaching culture in medical education.

OF-4-3 Presences and absences: Exploring social processes and structures and paradigms of education in interprofessional and quality improvement continuing professional development

Farah Friesen, University of Toronto

Background/Purpose: Social processes and structures (SPS, e.g. power relations, gendered roles, institutional racism, organizational norms) influence interprofessional (IP) collaboration and quality improvement (QI) practices. There's increasing recognition that addressing SPS is important in IP and QI education, yet paradigms of education that might provide meaningfully aligned and effective education approaches for SPS-related content remain underexplored. This study aimed to increase understanding of SPS-related content and paradigms of education across IP and QI continuing professional development (CPD).

Methods: We applied a multiple instrumental case study approach to two IP and one QI CPD programs across two Canadian academic health science centres. We conducted 28 hours of observations; 13 interviews with Centre leaders, program directors, and teachers; and collected program materials (e.g. slides, videos). Thematic analysis was undertaken using paradigms of education as sensitizing theoretical concepts.

Results: SPS-related content appeared across Centres, including health equity and power relations in patient engagement and interprofessional power dynamics, hierarchies, and sexism. Programs focused on delivery (e.g. cases, small group) rather than on pedagogies. Faculty identified challenges balancing foundational tools/frameworks content with critical knowledge.

Discussion: To design and deliver the most effective health professions CPD offerings, educators must carefully consider which paradigms of education align with the social complexities that shape and constrain QI and IP training, which impacts patient care. Our study highlights current absences and opportunities to further mobilize scholarship from critical social sciences and education research to better support teaching of SPS-related content in IP and QI CPD.

OF-4-4 From Small Seeds to Big Trees: Evaluating the Outcomes of an Education Scholarship Grant

Kulamakan Kulasegaram, University of Toronto

Background/Purpose: Local education grants are used to boost scholarship and enhance curricula. The Education Development Fund (EDF) at the Temerty Faculty of Medicine (TFoM) at the University of Toronto is a small peer-reviewed grant for education scholarship (ES) including innovation, evaluation, and research. We evaluated whether the grant was reaching its intended outcomes for stakeholders as well as unintended outcomes. We report lessons learned for the evaluation of scholarly grants.

Methods: This multi-phase evaluation studied projects funded between 2007-16 (93 projects). We interviewed recipients and education leaders between 2019 and 2022. We report themes and discuss implications and triangulation of these findings with results from other phases of the evaluation.

Results: Saturation was reached with interviews with 9 recipients and 11 leaders. Themes aligned with impact on the person (investigators), the project, and the wider context of the TFoM. Both groups perceived that the EDF was the first step in building capacity for the individual and indirectly, their department. Recipients noted that funding was the first step to a scholarly identity, and provided credibility and prestige. Participants and leaders both reported that EDF projects resulted in local curriculum implementation and/or change with occasional impact outside of the TFoM. At the TFoM level, funding promoted a culture of innovation and valuing scholarship (the system). The totality of these effects was the long-term building of networks and community across the TFoM.

Discussion: ES grants have wide impacts beyond publications and presentations. Studying unintended effects can better illustrate impact of ES grants on persons and systems.

OF-4-5 <u>Secure Recovery Care Education for Forensic</u> Interprofessional Staff – A narrative review

Shaheen Darani, University of Toronto

Background/Purpose: Recovery care empowers service users as active, collaborative participants in healthcare. Implementation can be challenging in secure settings because patients are unwilling service users of forensic services. Currently there is limited research on the value of secure recovery education programs for forensic staff. As far as we are aware, there have been no prior reviews of this literature. A review was conducted of secure recovery education programs for forensic interprofessional staff to identify factors related to effectiveness.

Methods: Medical and criminal justice databases were searched for articles describing recovery care education for forensic staff. Studies that included measurable outcomes were analyzed using an inductive approach. The review adhered to Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines for scoping reviews. Data were synthesized using Moore's 7 levels of outcomes for CPD education. Findings were described according to curriculum delivery and levels of outcome.

Results: Of 1283 articles, 5 were included in the final analysis. The programs achieved level 6 on Moore's taxonomy. Programs led to improvements in knowledge, skills, attitudes amongst staff. Experiential teaching was preferred and common themes related to programs' effectiveness included service user involvement, multimodal teaching methods, and relevance to forensic services.

Discussion: There is limited but positive literature suggesting that secure recovery care education programs are beneficial. No studies have demonstrated change in clinician behaviour. Future programs should involve service user facilitators, incorporate experiential components, and address staff resistance. This review can guide the planning of future programs based on CPD best practices.

OF-5

Admissions

OF-5-1 Development of a Bilingual Situational Judgement
Test (SJT) for Family Medicine Residency Selection in
Canada

Jordan Buxton, Work Psychology Group, Dr Keith Wycliffe-Jones, University of Calgary

Background/Purpose: Selection for Family Medicine (FM) residency training in Canada is high-stakes, and resource intensive. Programs have struggled to assess attributes required to be successful, including non-academic attributes. SJTs are increasingly popular within healthcare selection to assess relevant non-academic attributes, with significant validity evidence supporting their use. The development of a bilingual SJT in selection for FM residency training in Canada sought to address these challenges across a consortium of participating FM programs.

Methods: The SJT was carefully contextualized from a bank of validated SJT scenarios, and piloted in 2021, before being used operationally since 2022. All content was translated from English into French by certified medical professionals, then translated back into English to ensure equivalent translation.

Results: In 2023, N=3478 candidates completed the SJT (English version n=2959, French version n=519). Psychometric analysis demonstrated both versions obtained excellent levels of reliability (α =.82-.83), the same level of difficulty (77%), and positive candidate feedback. No significant differences in performance were observed based on language.

Discussion: Results provide evidence for contextualizing content from a bank of scenarios to use across FM programs in Canada, and the successful creation of a bilingual SJT. The introduction of the SJT has the potential to streamline the selection process for those applying to multiple FM residency programs, whilst being fair for all candidates, regardless of language. This research illustrates that it is possible to create a fair, bilingual SJT using good practice selection design, and translation processes. Learnings on contextualized, translated SJT content can be applied internationally.

OF-5-2 <u>Is there a significant difference in medical school</u> performance between students from biology-related versus non-biology-related undergraduate majors?

Laura Stovel, University of Alberta

Background/Purpose: The University of Alberta MD Program discontinued prerequisite science courses in 2017 in order to facilitate admission of students from a variety of academic backgrounds. We studied the first class with these Admission requirements to complete the MD Program to determine whether students from non-biology-related backgrounds performed differently than those from traditional biological sciences backgrounds.

Methods: Medical students from the University of Alberta MD Program Class of 2022 were grouped into biology-related and non-biology-related undergraduate majors. Assessment data at several points of medical school was analyzed: midterm and final marks in Foundations, the initial course of the medical school curriculum; Year 2 comprehensive exam; Year 4 comprehensive exam; and LMCC. Student anonymity was maintained using student ID numbers. Mean scores and SDs were determined for each assessment point for biology-related and non-biology-related majors. Scores were compared for significant differences between the two groups using a t-test.

Results: Students from biology-related backgrounds performed significantly better on the Foundations midterm than students with non-biology-related backgrounds. There were no significant differences between the groups on the Foundations final, Year 2 comprehensive exam, Year 4 comprehensive exam, or LMCC. There was a significant difference between the groups on the first assessment in medical school, the Foundations midterm. However, this difference disappeared by the end of the first course in the MD Program curriculum, and was not seen again. With the support of the curriculum, students from diverse academic backgrounds performed as well in medical school as students from traditional biological sciences backgrounds.

OF-5-3 Association of pre-residency publications with research productivity in residency, fellowship, and academic career choice among Canadian ophthalmologists

Daiana Pur, Western University

Background/Purpose: To assess whether the research output of medical students who matched into a Canadian Ophthalmology residency program influences their subsequent research productivity during residency, decision to pursue a fellowship, or engagement in academic practice.

Methods: Employing a database analysis (Scopus), this study consists of data spanning 11 match years (2004 to 2015) from all 15 residency programs. Additional searches were performed to collect information regarding fellowship training and subsequent practice setting. Multivariable analyses were employed.

Results: Residents with pre-residency publications (n = 187) showed significantly greater research productivity during residency compared to those without pre-residency publications (n = 182), with a mean of $5.17 \pm 5.97 \text{ vs } 1.60 \pm 2.38 \text{ (p} < 0.001)$ of publications on any topic. For each additional pre-residency publication, the expected number of residency publications increased by 1.17 (95% CI 1.09 - 1.27, p < 0.001) after adjusting for gender, match year, and residency program. Residents who published 1+ articles before entering residency were 2.9 times more likely to pursue fellowship training (OR, 2.9; 95% CI, 1.74 - 4.83) and 1.8 times more likely to opt for a career in academic medicine (OR, 1.85; 95% CI, 1.07 - 3.2) compared to those without publications before residency.

Discussion: Pre-residency research output is a significant predictor of research productivity during residency, as well as of the likelihood of pursuing fellowship training and an academic career. This suggests that pre-residency publishing reflects a propensity towards an academic trajectory. Further work is required in identifying and addressing barriers to medical student engagement in research.

OF-5-4 <u>Virtual vs. in-person medical school admissions</u> interviews predicting clinical communication skills: a natural experiment

Conrad Tsang, University of Toronto

Background/Purpose: The 2019-2020 medical school admissions cycle was disrupted when interviews shifted to a virtual format mid-cycle. At the University of Toronto, 2/3 of applicants participated in in-person interviews while 1/3 completed virtual interviews. Thus, the 2020 matriculant cohort creates a natural experiment to compare the validity of in-person and virtual admissions interviews. We report predictive validity evidence of inperson versus virtual interviews for clinical communication skills.

Methods: We modelled the association between the format and score of the admissions interview to our outcome, the Year 2 OSCE Communication score, for the matriculant cohort (n=244, including n=76 virtual). OSCE communication was previously predicted by in-person interviews, and interviews are often the only opportunity to assess verbal communication skills during admissions. We used generalized estimating equations to control for clustering by interview track. We adjusted for covariates including GPA, MCAT section, autobiographic sketch, personal statement, and reference letter scores.

Results: There was no difference between interview formats predicting the Year 2 OSCE Communication score (beta 0.000; 95% confidence interval [CI]: -0.082 to 0.081; p=0.996). Each point on the interview score, ranging from 1.0-50.0, was associated with a 0.011 increase (95% CI: 0.001 to 0.021; p=0.030) in the OSCE Communication score ranging from 1.00-5.00. There was no interaction between interview format and interview score. No other covariate was statistically significant.

Discussion: Our results add to growing validity evidence for using virtual admissions interviews. Interview performance is a statistically significant but weak predictor of clinical communication skills, demonstrating that admissions processes have room for further optimization.

OF-5-5 <u>Caveat Emptor! Impact of strategies addressing</u> threats from Al-generated responses in online recorded admissions assessments

Debra Sibbald, University of Toronto

Background/Purpose: Online recorded admissions assessments are at risk due to emergence of generative artificial intelligence (AI) tools, such as ChatGPT. We explore the impact of strategies to address AI threats prior to and after the 2023 admission cycle at the Leslie Dan Faculty of Pharmacy, University of Toronto.

Methods: Threats to online exam vulnerabilities were identified through a review of published evidence. We instituted deterrent stratagems: increasing question/answer length, reducing response time, minimizing editing functions, personalizing questions and strengthening misconduct penalties. Designated field test participants attempted to thwart these strategies using Al. Assessors were trained in detection and practiced rating using examples of Al responses. Assessors used red flags to alert admission test administrators to suspicious answers. Flagged cases were re-analyzed to determine Al responses.

Results: Published threats include detection, academic and professional credibility, implications for knowledge work or application, ethics and digital equity. It was not possible during rating or reconsideration to consistently detect AI responses. Tactics aimed at altering question elements were considered ineffective.

Discussion: Potentially effective strategies emphasize misconduct penalties; structuring assessment questions to increase personalized responses and discourage prompt writing; and assessor training for AI detection. The defensibility of recorded admissions tests is increasingly threatened by rapidly evolving technologies which overcome deterrent approaches. Challenges include validity, reliability, equivalence, impact on learning, feasibility, acceptability and sustainability. AI-generated responses confront the fairness, transparency, and objectivity of online Admission tests. Scrutiny for threats and timely responsive strategies are imperative. Revisit possibilities of one-on-one in person or online interviews, resources permitting.

OF-6

Simulation - Black Health and Wellness

OF-6-1 Time to Revel: Workplace supports for a flourishing workforce

Jing Wen (Jenny) Liu, Western University

Background/Purpose: Physicians play a crucial role within the healthcare system. However, the COVID-19 pandemic has placed an immense burden on them, leading to unprecedented levels of burnout. It is essential to implement safeguards that prioritize resilience and wellness, reduce the risk of adverse mental health outcomes, and ensure timely and effective support for those facing difficulties.

Methods: In response to this need, our team embarked on developing an organizational framework to implement wellbeing changes within healthcare organizations. Our approach aims to address the siloed nature of the system by bringing together voices from different levels to codevelop workplace support solutions. The project, REVEL, funded by the Public Health Agency of Canada (PHAC), outlines the steps taken to support healthcare workers at the individual, team, leadership, and organizational levels. To pilot the framework's development, we collaborated with three organizations: St. Joseph's Health Care London, Schulich School of Medicine and Dentistry-Western, and the Royal Ottawa Hospital. Additionally, we created tools tailored to each level of engagement, covering readiness and preparation, creating a supportive environment, and implementation methods.

Results: Traditionally, physician wellbeing initiatives have focused on individual-level interventions, such as mindfulness groups, self-care practices, and resilience skill-building. Unfortunately, many exhausted physicians lack the capacity for additional online modules. Therefore, there is a need to go beyond individual interventions and explore organizational-level approaches to tackle burnout challenges. Through our experiences of co-creating and co-developing solutions, we have realized that promoting physician wellbeing necessitates a departure from individual interventions. Instead, we require systems-based solutions to address organizational disconnect, lack of support, and restore faith in the healthcare system.

Discussion: The REVEL framework and its accompanying tools fill an urgent gap in initiatives addressing physician wellbeing beyond individual-level interventions. It is adaptable for implementation in various healthcare organizations, offering much-needed support to physicians in the future.

OF-6-2 Rapid cycle deliberate practice-based simulations as a complement to clinical exposure to achieve key behavioural outcomes during a critical care rotation

Dominique Piquette, University of Toronto

Background/Purpose: Rapid cycle deliberate practice (RCDP)-based simulations differ from traditional simulations by providing multiple, short debriefings within a scenario, allowing for immediate incorporation of feedback. This project's aim was to explore whether RCDP-based weekly simulations during a 4-week ICU rotation helped medical trainees achieve key clinical behavioral outcomes required for the initial assessment and management of critically ill patients. Our objective was that 80% of the trainees assessed end-rotation complete at least 80% of targeted key clinical behaviors.

Methods: Participants completed an ICU rotation at the study hospital between September 2022 and June 2023. We created four simulation scenarios based on clinical problems routinely encountered in acutely deteriorating patients and incorporating key clinical behaviors expected to be learned by the end of a 4-week ICU rotation. Each month, weekly simulations were scheduled: the first three using the RCPD technique, and a Week-4 simulation delivered as an uninterrupted scenario to assess learners' performance using a checklist.

Results: Twenty-three participants completed the final scenario, representing 42% of the trainees who did an ICU rotation during the study period. Forty-three percent (95%CI: 23%-64%) performed more than 80% of key clinical behaviours. There was no difference between trainees from different specialities, training levels, and numbers of practice simulations attended. Reviewing the medication list, calling for help, and requesting troponin were the clinical behaviours with the lowest rates of completion.

Discussion: Repeated RCPD-based simulations combined with clinical exposure during 4-week ICU rotations were only partially successful in teaching trainees key clinical behaviours required for the management of sick patients.

OF-6-3 Simulation Stimulation: Lessons from Pandemic-Era Virtual Teaching and Faculty Development to Enhance Teacher Performance for a Pre-Clerkship Psychiatric Deteriorating Patient Scenario Seminar

Julianah Oguntala, University of Toronto

Background/Purpose: Cardiovascular risk factors, such as hypertension, disproportionately affect Black Canadians. Dietary interventions, such as DASH (Dietary Approaches to Stop Hypertension), have demonstrated significant systolic blood pressure reductions. The lack of cultural food considerations limits utility amongst Black populations. Culturally-relevant diet counseling has not been studied as a secondary prevention tool in hypertensive Black individuals.

Methods: We provided a free 4-week virtual seminar on hypertension management from a culturally-sensitive nutritional perspective to hypertensive Black adults. At baseline, upon completion and 4-weeks post-seminars, participants completed the University of Kansas Nutrition Literacy Assessment Instrument (UKNLAI) with an exit survey via RedCap. Impact of the seminars on dietary choices was assessed on the 5-point Likert scale.

Results: Preliminary results are based on 8 participants (61.3 \pm 8.3 years old). Highest education levels were high school (62.5%) then college or diploma (37.5%). 87.5% of the participants were immigrants and 33.3% had a yearly income <\$20,000. 71% or more participants reported learning how to make healthier dietary choices, read food labels and engagement throughout the seminars. 71% of participants reported DASH diet adherence increased weekly grocery costs but improved self-perception of making healthier diet choices.

Discussion: Providing culturally-relevant dietary seminars to Black adults with hypertension can promote dietary changes and may increase the feasibility of maintaining a healthy dietary pattern for long-term management. However, increasing grocery costs following the DASH diet present a potential barrier. Next steps include delivering the seminars to 25 participants and determining the impact on nutritional literacy.

OF-6-4 <u>Does Sequence Matter? Effect of Simulated</u> Environment Complexity on Cognitive Load and Learning

Faizal Haji, University of British Columbia

Background/Purpose: High-fidelity simulation is pervasive in healthcare. Cognitive Load Theory (CLT) hypothesizes that such training increases cognitive load (CL) and may be detrimental for novices' learning. Previously, we showed novices engaged in simulation training in complex (high fidelity) environments had higher CL and worse performance compared with peers training in simple (low-fidelty) environments. Here, we investigated if training in a simple-to-complex sequence would counterbalance the CL and fidelity effects to improve novices' simulation-based learning.

Methods: In a three-arm prospective, randomised experiment, 52 novice medical students were randomly assigned to lumbar puncture (LP) training in a simple-to-complex (progressive), complex-to-simple (mixed) or complex-only sequence. LP performance, sterility, communication, and intrinsic, extraneous and germane load (IL, EL, GL) were measured during training and retention/transfer tests. Repeated-measures ANOVA was used to compare within- and between-subject effects.

Results: During skill-acquisition, sterility improved (p<.01) with no group differences. Progressive group GL was higher than the complex-only and mixed group (p<.01). Increased IL (p<.01) was observed in the progressive group over training; the opposite occurred in the mixed group (p<.01). At retention, IL was higher in both the progressive (p<.01, p=.02) and complex-only (p=.02 groups, with no group-based differences in LP performance. At transfer, no group differences were observed.

Discussion: Contrary to CLT's hypothesis, while changes in IL and GL matched theoretical predictions, this did not translate to improved LP performance at retention/transfer. Our results call into question the impact of training sequence, task complexity and/or fidelity on novice learning.

OF-6-5 The impact of a surgical boot camp and near-peer teaching on the acquisition of basic surgical skills in medical students transitioning to clerkship

Éolie Delisle, Université de Montréal

Background/Purpose: Simulation teaching is recognized by the scientific community as beneficial for acquiring surgical techniques. Near-peer teaching has proven to be an effective method for medical training. To address the concerns of medical students transitioning to clerkship, fourth-year medical students designed a pre-clerkship surgical simulation at the University of Montreal. This simulation's goal was to help students acquire the basic techniques for their surgical rotation.

Methods: In August 2023, an 8h surgical boot camp was organized and covered 11 different topics. The program included lectures and practical sessions. 21 students starting clerkship participated and completed a self-administered questionnaire before and after the workshop. The questionnaire aimed to evaluate their knowledge, technical skills, self-perceived confidence, anxiety, and motivation related to basic surgical procedures.

Results: Prior to the simulation, 66% of participants lacked confidence in their surgical ability. After completing the program, there were significant statistical improvements in both knowledge and self-confidence for all 11 procedural skills (p<0.05). 85% of attendees reported feeling confident to begin their rotation and 80% expressed confidence in performing tasks in the operating room.

Discussion: Students gain useful surgical skills by participating in workshops. Since every student who participated in the training would recommend it, citing its relevance and importance in the curriculum, we believe these courses should be integrated into medical school curriculums to increase students' skillset. Surgical simulations prepare medical students for rotations by increasing their technical capabilities and confidence. We recommend integrating it into the curriculum.

OF-7

Teaching and Learning

OF-7-1 <u>Using a mixed methods approach to exploring In-</u> <u>Person vs Virtual Interprofessional Teaching among health</u> <u>professional learners in Primary Care</u>

Deborah Kopansky-Giles, Canadian Memorial Chiropractic College

Background/Purpose: Interprofessional Education (IPE) serves to support the optimization of future workforce team-based care. IPE modules focusing on interprofessional collaboration were delivered in person from 2005-2018, then pivoted to virtual format during COVID-19 (2020-2023). As the modality of teaching may impact participant learning, we questioned whether transitioning to virtual learning served as a new opportunity, a setback, or had an insignificant impact. This study aimed to evaluate learner and facilitator perspectives on in-person versus virtual IPE.

Methods: Mixed methods were used involving a retrospective review of pre- and post-module learner questionnaires (2018-2023) and facilitator focus groups (FG). Descriptive and bivariant analysis was completed and thematic coding used for qualitative results. Institutional ethics approval was obtained

Results: Quantitative data from 212 learners representing 10 different professions were obtained. 108 responses were gathered from 4 in-person modules (2018- 2019) and 104 from 4 virtual modules (2021-2022). 4 module facilitators participated in the first FG. The second FG will be conducted in October 2023. Data from learners demonstrated high satisfaction with the modules both inperson and virtually, however close comparison identified differences in learners' level of self-perceived collaborative competency as well as preferences of learners related to module delivery. Debrief with facilitators post-module and the FG results identified challenges and opportunities for virtual delivery as well as preferences for mode of delivery

Discussion: Results demonstrated high satisfaction with the module in both delivery modes, however there were preferences and nuances described by both learners and teachers that will be considered in planning for future IPE module delivery

OF-7-2 <u>Residents-as-Teachers: Measuring Teacher</u> <u>Identity in Post-graduate Learners</u>

Christopher Jones, University of Toronto

Background/Purpose: Today's trainees are tomorrow's clinical faculty. As medical education expands to address projected shortfalls in the physician workforce, clinicians will increasingly be recruited to fill teaching roles. Research on teacher identity in higher education programs has produced instruments that measure multiple dimensions of teacher identity in clinical teachers and trainees. This study attempted to replicate and extend the results of one study that used such an instrument with first year resident physicians.

Methods: A 37-item teacher identity questionnaire was distributed electronically to trainees in a post-graduate medical education program at a single Canadian university. Responses from a total of 113 resident trainee responses were analyzed. Self-reported demographic data were also collected. Item and subscale response means, Cronbach's alpha, paired-sample and independent-sample t-tests, and ANOVAs were calculated.

Results: Reliability for the instrument was high. Overall, respondents reported strong teacher identity. Year of training proved to be the most salient factor associated with increased teacher identity. Residents with previous student-as-teacher training showed slightly higher levels of knowledge and skill in clinical teaching. Differences between trainees' perceptions of their current identity within certain domains and their desire for future improvement were significant.

Discussion: The results of this replication study demonstrate that an easily deployed instrument for measuring self-reported teacher identity can be used effectively within trainee populations at multiple stages of training. Using this validated instrument could inform both curriculum development and recruitment efforts as more clinical teachers are required to support new and expanding medical education programs.

OF-7-3 Making it stick: A qualitative inquiry of connection in virtual learning

Anne Mahalik, Dalhousie University

Background/Purpose: Medical schools are looking to optimise learner engagement and retention in CPD delivery. Active learning methods are increasingly recognised to enhance learning and virtual offerings have become more common. Curious how the transition to online learning would impact learner engagement, we undertook a study to explore perceptions and experiences of interaction in virtual, large-group CPD conferences.

Methods: Case-study methodology was used to study interaction during a virtual, large-group CPD conference. As part of this study, we conducted interviews with both conference presenters and learners (n=11), and a focus group with CPD organisers (n=4) to better understand their perceptions and experiences with interactive learning.

Results: Our study revealed a range of experiences with interaction during the virtual conference. There was strong emphasis on effective learner engagement and diminished capacity for social connection, specifically, as they relate to virtual learning. Speakers noted the importance of interactive strategies to make learning "stick", and while some learners felt that virtual learning enhanced their engagement with material, this was not universal. Conference organisers expressed concern with limitations regarding design, technology, and cost associated with virtual learning.

Discussion: Social connection is a key component of learning, particularly in large-group CPD. This study highlights the perceptions and experiences of interaction in a virtual learning environment, with resulting limited capacity for social connection among participants and its effect on engagement in learning. Implications of these findings and strategies for creating opportunities for interaction and fostering connection and engaged learning will be discussed.

OF-7-4 <u>Family Medicine Residents' Perceptions on an Innovative Clinic for Asylum seeking patients: An Exploratory Qualitative Study</u>

Emma Glaser, Université de Montréal

Background/Purpose: In order to adequately respond to the growing clinical care needs of asylum seekers in Canada, it is essential to train the next generation of healthcare professionals to be culturally competent. There is in fact little literature exploring the learner perspective when it comes to teaching and learning for this population. Our teaching unit, Bordeaux-Cartierville (University of Montreal), started an innovative clinic for asylum seeking patients with the involvement of family medicine residents to meet this pedagogical goal. To our knowledge, this clinic is unique in Quebec. Our primary objective was to explore the training experience of residents who participated in the innovative clinic for asylum seeking patients. We wanted to identify the facilitators, barriers, and learning outcomes in relation to providing care for migrants. We aim to optimize care for this population within a culturally competent perspective.

Methods: We used an exploratory qualitative case study and sought a purposive sample of first and second year family medicine residents (n=13) at the clinic. Data collection through three focus group discussions (n=4 or 5) is currently ongoing. Data analysis will be conducted using a thematic approach. The QDAMiner coding software, offered by the University of Montreal, will be used to organize the data. We anticipate that with the three groups, we will be able to identify all recurring and important themes in order to produce a comprehensive data analysis on the subject of the study and achieve data saturation.

Results: We aim to better understand residents' perspective on the migrant health clinic: their perceptions of the clinic, its benefits and limitations; the competencies developed in relation to the CanMEDS competency framework; desired improvements by residents; and their opinion on the impact of the clinic on their family medicine residency journey

Discussion: This study will be an important contribution to the litterature. Few clinics like this exist, and there is a paucity of data surrounding educational interventions in cultural competency. Understanding the resident perspective will help us improve our teaching clinic, and ultimately could help to improve the care we provide our patients. Furthermore, a better understanding of the resident perspective may help buttress our efforts to replicate this clinic in other contexts.

OF-7-5 <u>Standardizing Virtual Interactive Cases for</u> Pharmacist Prescribing for Minor Ailments

Certina Ho, University of Toronto

Background/Purpose: We created a series of 14 pharmacist prescribing for minor ailment (PPMA) cases, via the Virtual Interactive Case (VIC) System. Following a usability study of three pilot cases, users requested an enhanced feedback mechanism in VIC to better inform individual gaps in PPMA patient assessments. Our project is aimed to standardize the scoring/feedback mechanism of PPMA VIC to reflect community practice and provide case-specific feedback to users.

Methods: A preliminary scoring table was created incorporating feedback from the usability study of three PPMA VIC cases. Three independent pharmacy-student assessors then applied the scoring table on three VIC cases and regrouped to reach consensus on the final scoring table. The final scoring table was then applied to all 14 PPMA VIC cases by four independent reviewers.

Results: The final scoring table was separated into five "point" levels: 50, 25, 15, 5, and 0. If a PPMA VIC user asks all 50-point questions, then they have completed a core patient assessment of the respective minor ailment. If the user also asks the 25-point questions, then they are able to recommend patient-specific interventions. For the 15-point questions, they represent best practices for general patient-centered care. The 5-point questions are unrelated to the specific minor ailment, but present opportunities for health promotion. Finally, 0-point refers to irrelevant/unnecessary PPMA patient-assessment questions.

Discussion: Through an iterative/consensus-generating process, we standardized the feedback mechanism of 14 PPMA VIC cases. With this enhanced scoring method, pharmacists may better engage in the VIC learning experience and reflect on their PPMA patient assessments.

Block G

OG-1

EDI - Indigenous Health

OG-1-1 Changing Standards to Accommodate Religious
Attire in Health Care Settings: A Case Study of Policy
Advocacy

Umberin Najeeb, University of Toronto

Background/Purpose: In 2022, the Toronto Academic Health Science Network (TAHSN) approved a set of Standards to accommodate religious attire for all health care workers, learners, and volunteers in hospital areas with sterile procedures (ASP) across all of its affiliated hospitals (Islam et al., 2022). This research studied the process of policy advocacy from 2013-2022 to ascertain the barriers and facilitators to the process of policy advocacy and change.

Methods: The study was designed as single case study with two embedded units examining the advocacy periods between phase 1 (2013-2020) and phase 2 (2021-2022). Using a combined theoretical approach of policy windows (Kingdon 1984/2011) and interest convergence (Derrick Bell 1980), semi-structured interviews were conducted with 17 participants, including authors of the Standards document, subject experts, and key stakeholders. Transcribed interviews were analyzed iteratively for emergent themes related to barriers/facilitators during the policy advocacy process.

Results: In Phase 1, there were more barriers than facilitators. In Phase 2, there were more facilitators. Phase 1 barriers included learner mistreatment, unpaid equity work, and a complicated institutional hierarchy that did not sufficiently support champions. Phase 2 facilitators included sufficient institutional support for champions and allies, prioritization of advocacy work, and external factors (e.g., COVID-19 pandemic, enhanced societal awareness around racism) that transformed equity into a public health priority.

Discussion: The findings give insight into possible barriers/facilitators to implementation and change at a large academic institutional network with a diverse population. It may serve as best practice for other institutions addressing similar issues around accommodating religious attire in ASP.

OG-1-3 Bringing the Outside In: Engaging with Community-Based Organizations in an EDI Curriculum

Alexandra Manning, Dalhousie University

Background/Purpose: Advocacy related to equity, diversity and inclusivity (EDI), an important role for physicians, is often operationalized as advocacy for, rather than advocacy with. Advocacy for is using ones' social-political position to champion an agenda of the Other. Advocacy with is using ones' socio-political position to create space for the Others' voice — to disrupt hierarchical positions of power and foreground the voice of the Other in inclusive ways. To bring Other voices into the academic day curriculum, community-based organizations were invited by each psychiatry resident cohort (n=5) at Dalhousie University to participate in a one-day symposium.

Methods: The symposium was evaluated using a series of open-ended questions designed to elicit participant understanding of the purpose, perceived benefits, and challenges of the symposium. 29 of 35 participants completed the survey. An inductive thematic analysis was applied to the data.

Results: Comments fell into three broad categories: (1) Awareness of knowledge and resources; (2) Relevance to curriculum and practice, and; (3) Connection with self and Other.

Discussion: Participants described an increased awareness of issues related to EDI as well as a frustration in feeling "helpless" and "powerless" at times. Despite this tension, there was an appreciation for how psychosocial factors influence health and a clear desire to "do better." Sense of community was described as allyship with community organizations and also connection to peers and a desire to "learn together." The resident symposium is both a feasible and a novel curricular intervention to address advocacy as it relates to EDI in post-graduate training programs.

OG-1-4 I didn't really see anyone else that looked like me": Experiences of being a young person diagnosed with cancer from the lens of racially and ethnically diverse adolescents and young adults

Mirha Zohair, University of Manitoba

Background/Purpose: Although research has examined the unique adolescent and young adult (AYA) cancer experience, the perspectives of Black, Indigenous, and People of Colour (BIPOC) AYAs, who face increased challenges due to institutional racism and discrimination in healthcare systems, remain underrepresented. This study aimed to understand the unique challenges of being a young person diagnosed with cancer from the perspective of BIPOC AYAs with cancer in the Canadian healthcare system.

Methods: This qualitative study involved 22 one-on-one in-depth interviews with BIPOC AYAs diagnosed and treated for cancer between the ages of 15 and 39 across Canada. Five AYA patient partners, with lived experience of cancer, were recruited to contribute to the execution of the study, interview guide, selection of participants, analysis and interpretation of the data, and dissemination of the findings. A framework methodology informed analysis of results.

Results: The common themes that emerged in the experiences of being a young person with cancer included: (1) Psychosocial challenges (2) difficulty navigating the healthcare system, and (3) improving support for young people. Significantly, most of these experiences were shaped and exacerbated by aspects of their identity, race, and culture.

Discussion: Filling an important gap within current research, this study improves our understanding of the unmet needs of BIPOC AYAs with cancer within the Canadian healthcare system. The additional challenges faced by these minoritized young people with cancer must be considered while developing cancer care programs, to improve the outcome and overall quality of life of these AYAs in their cancer journey.

OG-1-5 Makoyoh'sokoi, a holistic health program for Indigenous women, using photovoice to explore their health journeys

Sonja Wicklum, University of Calgary

Background/Purpose: Background: Makoyoh'sokoi (the Wolf Trail Program) is a community-based, self-control, non-randomized, holistic health intervention for Indigenous women. The 15-week program includes exposure to diverse physical activities, health education modules, and celebration of culture through ceremony and sharing circles. The program, offered in eight communities across three provinces, is grounded in Indigenous culture and engages multiple health-related disciplines; supporting participants to reconnect with culture, Indigenous lay facilitators to advance their education in prevention, and providing an opportunity for non-Indigenous providers to better understand Indigenous culture.

Methods: Methods: At the end of the program and one year later, participants are asked to complete a reflective photovoice project responding to the question, "How was your health journey impacted by the program?" Perspectives of health that take into account mental, physical, spiritual and emotional dimensions are encouraged. The project is led by a peer researcher and participants are asked to take photos over the span of two weeks and then present 1-4 photos to the group in a sharing circle format.

Results: Results: Forty participants and five facilitators completed the photovoice project, submitting photos with written captions. Results give rich insight; themes include equating health to strength and support within families, to developing community, and to nature.

Discussion: Discussion: Community-based interventions that approach the multi-faceted nature of Indigenous health are important for addressing the systemic issues that contribute to the high prevalence of excess weight among Indigenous women. Participants enjoy the oral nature of photovoice as an evaluation tool as it aligns closely with Indigenous oral traditions.

OG-2

Physician and Medical Student Health and Well-being OG-2-1 Burnout Among Undergraduate Medical School Applicants

Anita Acai, McMaster University

Background/Purpose: Being a competitive medical school applicant is an important yet overwhelming priority for many students. While there is a vast amount of research on burnout among physicians and medical school students, there has been little research on burnout among undergraduate pre-medical students. This cross-sectional, survey-based study investigated the impact of medical school requirements on burnout in undergraduate medical school applicants.

Methods: The sample included 85 undergraduate students from McMaster University in their third year of studies or higher who had already applied or planned to apply to medical school the following year. Participants completed an online survey that focused on various medical school requirements (e.g., grade point average, the Medical College Admission Test [MCAT], research experience, extracurricular activities, and the application process for each medical school), and measured participants' burnout and intrinsic motivation using the Intrinsic Motivation Inventory and Maslach Burnout Inventory.

Results: Findings showed that participants were experiencing burnout and had a low to moderate intrinsic motivation to complete medical school requirements. The MCAT was reported to have the greatest negative impact on participants' well-being.

Discussion: These findings indicate a need develop or improve current stress management services and provide accessible resources to help students meet medical school requirements and alleviate symptoms of burnout.

OG-2-2 <u>Fostering Physician Well-Being and Bridging Educational Gaps through a Financial Wellness</u>
Conference

Stephanie Zhou, University of Toronto

Background/Purpose: Rising medical school debt has a detrimental impact on learners' mental well-being, academic achievements, and their choice of primary care careers, especially for equity-deserving groups. Residents report low financial literacy and readiness for practice management, yet effective financial planning throughout a physician's career is associated with improved well-being and retirement security. The Canadian Physicians Financial Wellness Conference was established to bridge this knowledge gap. This annual virtual event features expert-led presentations and small-group learning catered to medical professionals at all career stages.

Methods: Our study analyzed pre- and post-conference questionnaires from 728 attendees from 2021-2022 to gauge the conference's influence on participants' financial literacy and preparedness for financial planning. Using mixed methods, we used descriptive statistics to summarize demographic information and thematic analysis to highlight commonalities and unique observations provided in participant feedback.

Results: Overwhelmingly, our attendees shared that this conference addressed an unmet need by cultivating a community that facilitated networking and mentorship between physicians and trainees. Responses highlighted how this conference provided an unbiased learning platform to discuss topics not otherwise covered in training, such as family planning, retirement and debt management. Of note, the accessibility of the conference encouraged attendance from a majority female audience with representation across rural, suburban and urban geographies.

Discussion: As Canada's largest conference for physician financial education, we have created a national platform for physicians to mentor each other and learn to effectively manage their practices. These findings can inform the development of medical training programs and inspire similar initiatives, promoting regionally relevant financial education.

OG-2-3 <u>Faculty-Wide Peer-Support Program During the</u> COVID-19 Pandemic: Patterns of Access

Laura Foxcroft, Western University

Background/Purpose: The pandemic resulted in increased physician burnout. The Peers for Peers Physician Wellbeing Program provides one-on-one support for physicians. This study examined patterns of program uptake (N=402 interactions). We wanted to determine if there were any unique patterns for faculty accessing the peer support program.

Methods: We explored: 1, Who initiated the interaction and type of interaction 2. Who initiated the interaction and provision of referrals 3. Gender of faculty and type of interaction 4. Gender of faculty and referrals

Results: A chi-square test of independence was performed to examine relationship between: Initiator of Interaction and Type of Interaction. The relation between these variables was significant X2 (1, N=401) = 6.12, p <.01. Faculty Member Initiated sessions (as compared to Wellbeing Leads Initiated sessions) was more likely for First Sessions. Initiator of Interaction and Referrals. The relation between these variables was significant X2 (1, N=403) = 22.01, p <.001. Faculty Member initiated sessions (vs Wellbeing Lead initiated) were more likely to involve Referrals. Faculty Gender and Initiator of Interaction. The relation between these variables was not significant X2 (1, N=399) = .55, ns. Faculty Gender and Type of Interaction. The relation between these variables was significant X2 (1, N=398) = 4.84, p < .05. Men more like then women to have first sessions; and men less likely than women to have follow-up sessions.

Discussion: Faculty members are utilizing the peer support program. Wellbeing Leads play a crucial role in providing referrals to resources. The nature of concerns raised by men required one session only. Concerns raised by women were complex requiring additional sessions. The was no significant pattern between initiation of interaction by the wellbeing lead based on faculty gender.

OG-2-4 Easing the Transition to Clerkship – Perceptions of Clinical Clerks and Faculty of High Priority Topic Areas in a Transition to Clerkship Course

Kien Dang, University of Toronto

Background/Purpose: Students starting their clinical clerkship experience often feel unprepared. There are studies outlining student perceptions on preparedness for clerkship, and the effectiveness of curricular content of Transition to Clerkship (TTC) courses to help with the transition. However, to date, no studies have explored student and faculty perceptions on what curricular content should be prioritized in a short TTC course occurring immediately before clerkship.

Methods: We conducted a needs assessment surveying clinical clerks and clerkship faculty leads. They were asked if topics regarding workplace skills and professional development should be included in a TTC Course in the 2 weeks preceding clerkship, with the goal of easing the transition.

Results: 147 students and 47 faculty leads responded. Oral and written communication (S-86%; F-100%), mentorship from senior clerks (S-95%; F-86%), professional responsibilities (S-85; F-91%), and studying strategies in clerkship (S-80%; F-87%) were high priority for both students and faculty. Students also suggested that panel discussion with residents (81%), career planning (88%), clinical reasoning (81%) and procedural skills (88%) should be included. Faculty leads considered wellness topics (82%) to be a high priority.

Discussion: There were several areas of alignment among students and faculty including "studying strategies in clerkship" which is not included in most TTC courses. Students value learning from senior clerks and residents, which will likely also help inform career planning in preparation for residency matching. Preclinical years delivered virtually might have influenced student's prioritization of procedural skills. Overall, these identified priorities inform the curricular review of our TTC course.

OG-2-5 Range, Nuance, Temporality: A Phenomenological Exploration of Moral Distress in Physicians

Kevin Eva, University of British Columbia

Background/Purpose: Physicians often experience moral distress from being prevented from taking what they believe to be the right course of action. While causes and consequences of moral distress have been studied, little is known about lived experiences and the range of emotion associated with moral challenges. This study is an attempt to fill this gap to enable better support for learners and colleagues.

Methods: The researchers purposefully sampled twelve physicians from BC. Guided by hermeneutic phenomenology, data were collected through individual semi-structured interviews and analysis was informed by van Manen's six hermeneutic activities.

Results: Moral distress affected physicians in varying and long-lasting ways that generated a wide range of emotional reactions. Intensity was mediated by several situational factors, including being blamed or having to explain decisions. Overall, there was a sense of inevitability regarding the need to face morally challenging situations throughout a medical career. The experiences "dwelled" in participants for a long time, influencing their sense-making, professional identity, and well-being. Consequently, participants sought consolation and meaning in numerous ways.

Discussion: This study adds insights into the range, nuance, and temporality of emotions that arise in morally challenging situations. This understanding can help mentors and educators engage in conversations about moral distress with their colleagues and learners. Specifically, we propose that foregrounding the emotional experience of moral distress—by employing various discourses of emotion with intellectual and emotional candour—offers promise as a means to better prepare learners for the inevitable by strengthening their capacity to engage with emotions effectively.

OG-3

Teaching and Learning - Black Health and Wellness

OG-3-1 <u>Bridging Healthcare Disparities: Developing an</u>
<u>Online Course on Black Health Primer</u>

Amisah Bakuri, University of Toronto

Background/Purpose: Healthcare disparities continue disproportionately affect Black communities, stemming from systemic inequities and biases. To address this critical issue, our research presents a comprehensive curriculum developed by the Black Health Education Collaborative titled Black Health Primer. The Primer aims to equip healthcare professionals with knowledge and tools to provide equitable care to Black people.

Methods: The course development involved a multidisciplinary research team and a scientific planning committee consisting of 25 medical and healthcare professionals, educators, scholars and learners. Drawing from expertise in Black health, anti-Black racism and critical race theory and medical education, the course was designed to explore historical, social, and structural factors influencing Black health outcomes. We employed literature reviews, expert consultations, and community engagement in developing the Primer. Multimedia resources such as narration, expert videos, case studies, and interactive assessments to engage learners effectively.

Results: The Black Health Primer offers an evidence-based and culturally safe curriculum that addresses health disparities affecting Black populations. The content was validated and piloted by diverse learners to ensure relevance and effectiveness. Preliminary feedback indicates high learner engagement and an increased awareness of healthcare disparities and Anti-Black racism within healthcare practice in Canada.

Discussion: The development of the Black Health Primer is an innovative, first-of-its-kind work that signifies a critical step towards mitigating healthcare disparities in Black communities. By addressing the root causes and historical context of these disparities, healthcare professionals can become better equipped to provide patient-centred, culturally competent care and enhance the quality of care provided to Black people across Canada.

OG-3-2 An analysis of asking and answering questions in Continuing Professional Development Activities

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 viewed as 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. Implications for optimizing AAQ and discussion of possible training approaches were discussed.

Results: 400 questions were audited. 310 were closed-ended, direct questions, 52 were open-ended, direct 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 (67), rationale for conclusions (65), clinical implications (75), future directions (65), comparison to other studies (35) and miscellaneous (35). Questions were more focused during in-person events. Options to optimize AAQ included curricular, direct interventions, coaching, role-modeling, program enablers and peer-to-peer learning.

Discussion: This study demonstrates that a spectrum of skills exists 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. Strong AAQ skills enhance participant understanding and improve clinical practice

OG-3-3 Exploring and Understanding the Needs of the Caregivers of People Living with Dementia (PLWD) from Diverse Populations in Urban and Rural Areas of Quebec

Sarah Aboushawareb, McGill University

Background/Purpose: Little is known about the needs of caregivers of PLWD with only two studies that explored those needs in Canada in 2008 and 2012. In addition, the existing research lacks the use of validated surveys and does not explore domains such as gender and race which affects caregiving. Accordingly, the aim of our work is to explore and understand the needs of the caregivers of PLWD from diverse populations in Quebec to inform the design and content of online educational modules for the caregivers.

Methods: Sequential explanatory mixed methods. In the quantitative phase, a validated needs assessment survey is distributed to the caregivers, and the data collected will be analyzed using descriptive statistics and used in the next phase. All outcomes will be stratified by gender, age, race, and geographical location. In the qualitative phase, the results will be discussed in focus groups with caregivers and thematic analysis of the transcripts will be conducted to validate and clarify the collected quantitative data. Integration will happen at the stage of interpretation, reporting, and integration of the results into educational modules.

Results: Anticipated Results: The outcome measures for the quantitative phase: caregiving related to physical/nursing care, household work, supervision, coordination, receiving formal services, housing/transport, costs, personal health, family relationships, and planning for crises, and future. For the qualitative phase: Major themes related to caregiving.

Discussion: The results of this work will allow for the creation of educational modules that are tailored to the needs of the caregivers of PLWD in Quebec.

OG-3-4 <u>The role reflexive practice plays in development of professional competencies</u>: a narrative inquiry study

Nicolas Fernandez, Université de Montréal

Background/Purpose: Reflective practice can be construed as a wicked problem. The lack of empirical data as to how this practice is carried out and how it supports competency development has stymied progress toward finding appropriate educational approaches. We sought to build a nuanced, empirical perspective using narrative data from in-service healthcare professionals about the triggers of reflection and their perceptions how reflective practice enhances practice.

Methods: We collected 26 narrative accounts from healthcare professionals in four disciplines: occupational therapy (n=6), nursing (n=6), medicine (n=6) and speech therapy (n=8). Participants were clinicians with at least 3-years clinical experience and asked to choose and tell about reflective events that led to meaningful changes in their practice. Research assistants,, students from the same professions, conducted the interviews and wrote the narrative accounts. Accounts were analyzed through structural analysis to extract meaning embedded in the narratives.

Results: Reflection is triggered by contextual factors, often resulting in transitions to different clinical settings. Clinicians' affective reactions to negative interpersonal experiences triggers reflection on issues of identity and belonging. Reflection plays a critical role in applying new biomedical knowledge to clinical performance and constitutes a powerful means to build self-confidence and agency.

Discussion: Narrative accounts provide firsthand evidence of how reflective practice influences continuous professional development in the health professions. Although the triggers might be different in each profession, reflective practice leads to similar outcomes: efficient insertion in clinical teams and enhanced agency as practitioners. We are currently developing empirical conceptualizations based on our results to provide effective guidance to educators.

OG-4

Assessment - Indigenous Health

OG-4-1 TRC Calls to Action 23 & 24 Report Card Project

Kensington Renneberg, University of British Columbia

Background/Purpose: In 2014, the Truth and Reconciliation Commission (TRC) urged medical schools to enhance Indigenous representation by increasing Indigenous physician numbers, ensuring their retention in Indigenous communities, offering cultural competency training, and mandating Indigenous health curriculum. Recognizing the vital role of understanding Indigenous medical students' perspectives, our project aims to provide schools with feedback on their implementation of TRC Calls 23 and 24, as seen through the lens of Indigenous student experiences.

Methods: For three consecutive years, a survey was administered to Indigenous medical students across Canada. It gathered insights on their experiences and perspectives regarding their school's implementation of the TRC's 23rd and 24th Calls to Action. Data analysis utilized standard descriptive statistics and UBC grading standards to produce a report card for each school.

Results: In 2021-2022, we received responses from 53 participants across 14 medical schools. The median scores were as follows: Overall, 58.34% (IQR = 50.70 - 63.75); Call 23: 62.29% (55.63 - 70.90); Call 24: 41.08% (34 - 46.25); Student-faculty relationship: 59.71% (50.16 - 67.67). These percentages gauge the perceived effectiveness of each school in fulfilling the TRC Calls. Notably, there has been no significant change in scores over the past three years.

Discussion: This data establishes a baseline for evaluating how schools are responding to the TRC Calls, while pinpointing areas for improvement such as Indigenous cultural safety training and recruitment/retention efforts. More broadly, this project fosters dialogue within Indigenous medical communities regarding institutional evaluation, community inclusion, and how we define success.

OG-4-2 <u>Negative, Uncomfortable, Harmful, or Invisible?</u>
<u>Examining Evaluation and Reporting on Less-than-</u>
<u>Desirable Intervention Outcomes</u>

Betty Onyura, University of Toronto & Centre for Addiction and Mental Health

Background/Purpose: Evaluation is critical to understanding innovative programs' impacts as they are implemented, adopted, or scaled-up. However, evidence suggests that innovations are often implemented without adequate contemplation of risks. There is a gap in research on evaluating and reporting intervention effects that may be undesirable or harmful. This study is part of a series focused on examining the evaluation of less-thandesirable effects of medical educational interventions using synthesis research.

Methods: We conducted an umbrella review and used a systematic, multi-database search to identify evaluative studies of innovations. The search yielded 6409 articles that underwent duplicate screening. Ultimately, 172 reviews were included. Data quality was assessed using a modified version of the AMSTAR-2. Pertinent data were extracted and synthesized using framework analysis.

Results: Most systematic reviews did not address the possibility of undesirable outcomes in their a priori study design. Only one article (0.6%) employed methods explicitly designed to explore harmful effects. However, approximately 50% of reviews reported on outcomes that included elements that could generally be considered undesirable or potentially harmful in their findings.

Discussion: Summary Attention to the evaluation and reporting of undesirable intervention outcomes is limited in medical education research. Innovations may trigger undesirable or harmful consequences that may not be apparent to those leading or evaluating innovations. Notably, what is considered undesirable, unavoidable discomfort, or harmful may be contested with potential or foreseen benefits of an intervention. Better guidance is needed on understanding, evaluating and reporting such outcomes. This research presents implications for how such practices can be developed and applied.

OG-4-3 One size does not fit all: Adapting collaboration assessment and interventions to primary care teams

Dean Lising, University of Toronto

Background/Purpose: Primary care teams consist of multiple professions with diverse scopes of practices. Interprofessional competencies, curricula and interventions have traditionally been conceptualized and implemented in non-primary care settings. Reeves et al. (2018) problematized traditional conceptualizations of teamwork recognizing collaboration is a dynamic process based on context. Asynchronous and virtual communication may at times be more appropriate for a distributed primary care team versus a critical care hospital team.

Methods: With grant funding, collaborative care programs and associated interventions were adapted for primary care teams across Canada. Standardized team assessments and quantitative scales for collaboration were revised to support primary care teams reflect and be streamed into customized interventions and programs.

Results: Over 200 health providers in intact teams are currently being streamed and undergoing collaborative assessments and programming. Preliminary results and pilot testing show the assessment and interventions are applicable for both clinical and non-clinical members of primary care teams. Evaluations are demonstrating the value of tailoring collaborative interventions specific to primary care teams.

Discussion: Attention and investment in collaboration for primary care teams is crucial to the provision of high quality, safe patient-centred care. Assessment, interventions and models needs to be adaptive, not generalized, to be inclusive of the context, nature and nuances of primary care teams. Primary care teams have unique challenges such as differing funding structures, schedules, geographical locations, power dynamics and accountabilities. Therefore, there is a need to create assessments and interventions focused on collaboration specific to primary care teams.

OG-4-4 <u>Deciding to disclose: Understanding the</u> assessment comments that go unwritten

Andrea Gingerich, University of Northern British Columbia

Background/Purpose: As we are transitioning from high to low stakes assessment in the workplace, it seems that the phenomenon of failure to fail is morphing into one of failure to write. Although much is known about supervisors' resistance to writing assessment comments, less is known about that which resists being written. Because undocumented performance-relevant data threatens the validity of our assessment processes, we examined the assessment comments that go unwritten.

Methods: Using constructivist grounded theory methodology, we analyzed examples shared online from 52 Canadian physicians of assessment comments they decided not to write and the attempts of 13 physicians to then write those comments in follow-up interviews.

Results: Writing assessment comments can be conceptualized as an act of disclosure that involves deciding if any information should be disclosed, what information could be disclosed, and how to disclose that information. It is underpinned by tensions such as subjectively interpreting the validity of objective data, aiming to capture verbal feedback as assessment comments but viewing feedback as a private conversation, leaving out the "why" to protect the learner but worrying about comments being misinterpreted, and wrestling with the sense that writing it down is like writing them up.

Discussion: Determining which data are appropriate as assessment comments is surprisingly troublesome. In choosing not to write certain assessment comments, supervisors showed commitment to the learner and the educational alliance. The choice stemmed from a conflict between the teacher and assessor roles and invites us to reconsider the conflation of feedback and assessment in a single process.

OG-4-5 Moving beyond self-report surveys: Gamification for knowledge assessment

Stephen Miller, Dalhousie University

Background/Purpose: The accrediting bodies for CPD are pushing for more objective measures of educational impact. In an effort to move beyond self-reported surveys of knowledge acquisition, we implemented an end of day multiple-choice quiz for our therapeutics conferences.

Methods: We invited faculty speakers to submit multiple choice questions to ensure questions reflected session objectives and content. The end of day sessions were part of a 2-day accredited hybrid conference. We used a conference rebate as an incentive for the top three scores. Participant feedback on the sessions (n=2) were collected using an online survey and quiz results were collected using Kahoot! software. Correct responses were shared with conference attendees as part of the session. Data were analyzed using descriptive statistics and chi-square test of differences.

Results: The overall response rate was 39% (39/99). 98% agreed the sessions were useful and 94% agreed that they gained new knowledge. Average participant scores were 66% (range: 40-100%). More in-person attendees participated in the quiz sessions than virtual attendees, but this difference was not statistically significant. Narrative comments indicated that participants found the sessions fun and interactive.

Discussion: Participant feedback on the quiz sessions was positive and support its use as a strategy to review key pearls at the end of day. We will continue to use these sessions to support consolidation of knowledge at multisession conferences. These findings support the use of an end of day quiz to engage learners and support knowledge retention.

OG-5

Family Medicine

OG-5-1 <u>How resident physicians in Family, Emergency, and Pediatric Medicine seek or avoid feedback</u>

Meredith Vanstone, McMaster University

Background/Purpose: While medical education evidence clearly indicates the importance of feedback and coaching for the development of competencies, understanding learner perceptions and behaviours regarding feedback from direct observation of clinical care remains a gap. We explored how medical learners in three residency programs navigate feedback opportunities through direct observation, a cornerstone to competency-based learning. Effective incorporation of direct observation for feedback is essential to support learner development while preserving their sense of independence and efficiency.

Methods: We conducted a constructivist grounded theory study that incorporated multiple non-participant etic observations paired with individual interviews. Data collection and analyses were iterative and refined through progressive stages of research.

Results: We conducted 36 observations and 18 interviews with 18 residents working in three different specialty areas. Findings emphasize an uncertainty among learners regarding what constituted feedback, as their interactions with preceptors often blended direct observation, teaching, and feedback. This uncertainty was sometimes associated with an emotional and cognitive load that made some feedback feel uncomfortable or threatening. Learners trying to avoid direct observation reported time constraints (i.e., prioritizing efficient workflows over feedback), the need for emotional self-management (i.e., avoiding negative emotions associated with being 'wrong'), and interpersonal conflict (i.e., feeling disrespected or untrusted by their preceptor/supervisor).

Discussion: This study higlights complex and interwoven factors within the learner and the clinical environment that influence their decisions to seek or avoid direct observation and feedback. It underscores the need for a nuanced approach to feedback in medical education to address these complex dynamics effectively.

OG-5-2 Rethinking how we educate our future family physicians: Conceptualizing the Queen's University-Lakeridge Health Campus (QLHC)

Eugenia Piliotis, Queen's University

Background/Purpose: The Canadian healthcare system, and Family Medicine in particular, is facing a capacity crisis which compromises the principles of universality and accessibility. To address these challenges, systems-level reform is required. Specific to medical education, there is an urgent need for educational institutions to ensure they are preparing the next generation of family physicians to meet Canada's healthcare needs. The purpose of this presentation is to describe an innovative educational initiative designed to address this gap.

Methods: In 2022, a collaborative partnership launched the Queen's University-Lakeridge Health Campus (QLHC), an initiative designed to address the critical and contemporary healthcare needs of Canadians through purposeful recruitment and educational development of learners interested and committed to comprehensive community-based family medicine. Members from the Queen's University and Lakeridge Health communities worked together to advance recommendations on how to best structure, adopt, and implement the QLHC.

Results: The QLHC was founded on six key components: (a) admissions, (b) curriculum, (c) faculty engagement, (d) community engagement, (e) facilities, and (f) learner experience. The QLHC also included an emphasis on knowledge translation, program evaluation, and educational scholarship. This presentation will provide an overview of how the QLHC addressed these key elements to produce practice-ready family physicians who are specialized in offering comprehensive care to diverse patient populations.

Discussion: This presentation offers insight into an innovative educational initiative which represents a disruption to the traditional medical education model and a paradigm shift towards ensuring that medical education structures are systematically designed to meet Canada's healthcare needs.

OG-5-3 <u>Using learning analytics to examine teaching about</u> chest pain in family medicine residency training

Shelley Ross, University of Alberta

Background/Purpose: Women have achieved gender equity with men when it comes to leading cause of death: coronary heart disease. Given this fact, it is essential that family physicians are prepared to care for patients of both genders who present with chest pain. We used learning analytics to examine clinical workplace teaching about gender and chest pain in one family medicine residency program.

Methods: We used secondary data analysis of 12 years (2010 - 2022; N=67,503) of learning analytics data (FieldNotes: formative workplace-based assessments). FieldNotes include narrative feedback to learners and descriptions of patient presentations, thus serving as a proxy for clinical teaching. We used search terms (chest pain, heart, IM) to extract FieldNotes, then reviewed each note to determine relevance, as well as gender of the patient. Analyses consisted of descriptive statistics and data visualization.

Results: Our search resulted in 942 FieldNotes. An average of 1.4% of FieldNotes each year were about chest pain (Range 0.8%-3.2%), with minimal change year to year. Sex could not be determined for the majority (70.9%) of FieldNotes; the remainder were split between female (15.9%) and male (13.9%) patients.

Discussion: Our findings suggest that frequency of teaching about chest pain has not changed much since 2010. While we had expected to see an increase, it is possible that there have been changes in how preceptors are teaching related to gender differences. However, the large number of "sex unspecified" FieldNotes prevent further examination of this question. Our study does show the potential of learning analytics to look for curricular gaps.

OG-5-4 Houston, we have a problem! A cross-sectional survey of academic family physicians' provision of office-based gynecologic procedures

Parisa Rezaiefar, University of Ottawa

Background/Purpose: Globally, women and people with female-assigned reproductive organs experience barriers in accessing office-based gynecologic procedures (OBGPs), an issue compounded by the COVID-19 pandemic. This study aimed to provide a cross-sectional snapshot of the practice patterns of academic family physicians (AFPs) and identify the barriers they encounter when providing OBGPs.

Methods: An anonymous survey was circulated to 17 family medicine departments across Canada. Eligible respondents were AFPs practicing family medicine more than 20% of their time. The survey included questions on demographics, practice patterns pre-post pandemic, and barriers to performing OBGPs. Descriptive statistics and bivariate associations were computed.

Results: Eighteen of 71 (26.9%) total respondents reported having enhanced skills training with a certificate of added competence (CAC). Most participants (97.2%) performed >1 Pap smear per month, while provision dropped to 5.6-67.7% for all other OBGPs assessed. A higher percentage of CAC holders in women's health and low-risk obstetrics provided IUD insertions (100% vs. 67.3%) and endometrial biopsies (90.0% vs. 53.1%) than general AFPs. During the COVID-19 pandemic, respondents reported reducing or completely ceasing to provide Pap smears (44%) and all other OBGPs (20%). Barriers to offering OBGPs included lack of knowledge, procedural skills, and insufficient patient volumes to maintain competence.

Discussion: This study's findings highlight the urgent need to integrate women's health and low-risk obstetrics CAC holders into a centralized referral system to improve access to OBGPs. Additional and innovative strategies are also required to tackle the persistent procedural skills educational gap for trainees, practicing and faculty family physicians simultaneously.

OG-5-5 <u>Family Medicine Training Data Facts!</u> **Ivy Oandasan, College of Family Physicians of Canada**

Background/Purpose: In 2010 the College of Family Physicians of Canada (CFPC) launched the Triple C Competency based curriculum. As part of a mixed methods program evaluation approach, the Family Medicine Longitudinal Survey (FMLS) started to capture information about changes in perceptions about family medicine (FM), practice intentions and choices. Over 10 years of FMLS data offers a distinct opportunity to explore trends in learning experiences, future practice intentions, and practice patterns after training.

Methods: Secondary weighted analysis was conducted on de-identified, aggregate FMLS data from exiting residents in 2018-2019 and the same cohort three years post residency graduation. Average response rate is 62% (N=1803) for exiting residents across 17 FM residency programs and 20% (N=644) for three years post graduation. Ethics approval was obtained at all participating FM residency programs.

Results: On average, exiting residents reported no/minimal exposure to rural populations (14%), intrapartum care (15%), palliative/end of life care (19%), office-based clinical procedures (19%), marginalized, disadvantaged and vulnerable populations (35%), long-term care facilities (38%), care in the home (49%), Indigenous populations (58%), and in-hospital clinical procedures (68%). On average, 35% of respondents three years post graduation reported seeking further training. Of these, 58% reported doing so to enhance confidence.

Discussion: Family medicine is a critical component of primary care. Understanding possible influences of residency training on practice outcomes is needed for curriculum planners and health systems researchers to determine where, what and how early career physicians will ultimately provide care in Canada. The FMLS helps to address this information need.

OG-6

International Medical Graduates

OG-6-1 <u>Hiding in Plain Sight – the Challenges of being a</u> Canadian-International Medical Graduate

Zahra Merali, University of Toronto

Background/Purpose: It is widely recognized that International Medical Graduates (IMGs) require special support, including support with cultural integration. However, many are Canadian citizens who studied abroad (C-IMG) and, not infrequently, they are assumed to not require support. This is untrue. Their needs are different but, currently, poorly understood. As a result, Internal Medicine (IM) programs are limited in their ability to develop targeted interventions.

Methods: We used constructivist grounded theory to guide study design and analysis. Data included semi structured interviews with IM residents and Program Directors or Designated Faculty from across Canada. Consistent with our methodology, we used constant comparison and iterative cycles of data collection and analysis.

Results: Both the C-IMG and faculty participants described a, "often invisible to others critical catch-up period" that C-IMGs appeared to experience when starting residency. This was characterized by the early personal recognition of a gap between their good theoretical but minimal application knowledge and their need to stay hidden while still keeping patients safe. Many resident participants also described a lingering feeling of self-doubt that persisted well beyond first year. All identified the need for new strategies.

Discussion: C-IMGs experience distinct challenges that can have long-term consequences. Consistent with participant's suggestions, we suggest developing interventions focused on making it safe to "visibly" acknowledge the gap and thereby explicitly develop strategies and receive support for narrowing it. This can be facilitated by genuine near-peer (with prior C-IMGs) and faculty mentorship. Future directions should include developing and implementing such interventions and measuring their impact.

OG-6-3 <u>Personal Learning Plans for IMGs: Supporting the</u> Whole Person Through Co-Created Relational Learning

levgeniia Rozhenko, University of British Columbia

Background/Purpose: New to practice international medical graduates (IMGs) face unique cultural and organizational challenges. Research shows that guidelines and support to navigate local health systems are difficult to access, leaving IMGs to learn through trial and error rather than established pathways and guidance (Lockyer et al., 2010).

Methods: UBC CPD's Personal Learning Plans (PLP) program matches individual learners with a concierge and physician advisor to identify learner needs and develop a bespoke educational plan. Support is provided to PLP learners in the form of mentoring and curated resources; emphasis is placed on a learner-centered approach to learning. Semi-structured interviews with PLP participants (n=13) and PLP program team members (n=5) were conducted and analyzed using thematic analysis to capture learners' experiences with the program.

Results: Results highlighted the strong need for IMG-specific education, as IMGs require unique supports when learning about local health care systems and culture. PLP learners appreciated the co-created learning process that was structured and non-prescriptive, and the curated resources provided throughout the program. Participants reported establishing relationships with peers and increased comfort with navigating Canadian resources, which helped increase comfort in practice. Further, results showed that having a safe space to connect in relationship with the PLP physician advisors and concierges supported transition into Canadian medical practice.

Discussion: Our data suggest that co-created, relational learning adds value to our health care system and highlights the importance of considering how this value is measured.

OG-6-4 Exploring explanations of transition supports and success for international medical graduates

Anurag Saxena, University of Saskatchewan

Background/Purpose: Programs for International Medical Graduates (IMGs) have shown low success rates; and for those who are successful, there are low retention rates for remaining in rural/remote communities. The aim of this project was to use a realist theory-driven interpretive approach to explore how, why, and in what contexts IMG programs and support interventions can be designed to promote successful transition and integration.

Methods: Using Pawson's six iterative stages in realist review, we explored the question "what are the key contextual factors and underpinning mechanisms which influence the success or failure of support programs for IMGs in a foreign healthcare setting?" A systematic literature search, quality assessment of selected literature, data extraction of CMO (context, mechanism, outcome) configurations, data synthesis, and saturation of results were carried out.

Results: An initial 2,146 articles were retrieved. After screening, 613 articles were identified for appraisal; from these 165 articles were selected for data extraction. A total of 29 CMO configurations were developed and categorized into the three core areas within the initial program theory: knowing why (7 CMOs related to psychological capital (e.g., personal and professional values)), knowing how (10 CMOs related to human capital (e.g., professional clinical skills, competencies)), and knowing who (13 CMOs related to social capital (e.g., communication, relationship networks)).

Discussion: The results from this study allowed for the recognition of 29 CMO configurations important to understanding IMG adaptation and transition to a host country. Findings from this study have implications for recruitment and retainment of IMGs in rural and remote communities.

OG-6-5 <u>Predictors for success and failure in international</u> <u>medical graduates: a systematic review of prognostic</u> studies

Inge Schabort, McMaster University

Background/Purpose: International Medical Graduates (IMG) are an essential part of the international physician workforce and exploring the predictors of success and failure for IMGs could help inform international and national physician labour workforce planning

Methods: We searched 11 databases, including Medline, Embase and LILACS, from inception to February 2022 for studies that explored the predictors of success and failure in IMGs. We reported baseline probability, effect size (in relative risk (RR), odds ratio (OR) or hazard ratio (HR) and absolute probability change for success and failure.

Results: Twenty-four studies (373,784 participants) reported the association of 93 predictors of success and failure for IMGs. Female sex, English language proficiency, graduated ≤5 years and higher scores in USMLE step 2, Clinical Problem-Solving Test and Situational Judgment Test were associated with success in qualifying exams. IMGs who scored higher on the USMLE 2 clinical knowledge and in-training examination in post-graduate year (PGY) 1, 2 and 3 were less likely to fail the American board of family medicine certificate. IMG residents who previously completed internships were more likely to pass the Royal College of Physicians and Surgeons of Canada certification exam on the first try. IMGs and candidates who attempted PLAB part 1, ≥4 times vs first attempters, and candidates who attempted PLAB part 2, ≥3 times vs first attempters were more likely to be censured in future practice. Patients of non-USIMG vs US medical graduates had significantly lower mortality than U.S. graduates, and patients of non-USIMGs had lower mortalities than patients of USIMGs.

Discussion: This study informed factors associated with success and failure for IMGs for policy makers and organizations making decisions about IMG selection.

OG-7

Teaching and Learning

OG-7-1 <u>The Language of Medicine to Appear Competent</u>

Jinelle Ramlackhansingh, Memorial University

Background/Purpose: Learning the new medical language has been reported to be "critical" for medical students' symbolic participation and identification with the profession. The language of medicine is seen as a symbol that identifies learners as members of the medical community. The use of medical language distinguishes and separates the medical student from the lay community and can make them appear surrounded by mystery, almost "priest-like". The students learn to communicate in a new "symbolic system", that separates them from the lay person.

Methods: This research is a longitudinal critical ethnography examining professional identity development in pre-clinical medical students at a Canadian University. Monthly focus groups were done with students and semi-structured interviews with faculty and administrative staff. The theoretical frameworks of Bourdieu and Foucault were used in the data analysis.

Results: In their clinical skills sessions, the students quickly came across a new language in the form of unfamiliar medical terms they found difficult to pronounce. The students commented that medical jargon was expected and acceptable in medical practice. Students found the language difficult to pronounce and spell, creating feelings of anxiety. The students acted to relieve their anxiety by memorizing the spelling and practicing the words with their peers. These acts provide collective support for students in their mastering of the new language. In working to master this new language, they wear a "cloak of competence". Learning a new language is part of the socialization of students into the medical culture as they move from outsider to insider status.

OG-7-2 Educational Ideals vs. Reality: Exploring the Preferences and Practices of Attending Physicians on the Internal Medicine Clinical Teaching Unit

Shiphra Ginsburg, University of Toronto

Background/Purpose: The Clinical Teaching Unit (CTU) model has been a cornerstone of Internal Medicine training for decades, yet best practices around educational activities on the CTU are not clear. This study explored the current landscape of attending practices on the CTU, perceptions of the ideal educational practices on CTU and the barriers to achieving them.

Methods: We developed and conducted an e-survey to gather opinions from CTU attending physicians from one institution (n=92). We designed the survey to maximize written responses by providing numerous prompts throughout and sufficient space for open-ended, free text narratives. These were analyzed thematically.

Results: Response rate was 87% (80/92). We identified three major themes. First, attendings' opinions of ideal practice were not uniform, with some areas showing greater variability than others. Preferences were supported with explicit justifications and perceived educational benefits, even if limited by real-world constraints. Second, respondents noted a shift in residency culture and residents' expectations over time. Finally, attending wellness has suffered due to high clinical workloads, staffing reductions and prioritization of learner needs.

Discussion: Heterogeneity in CTU educational approaches stems from a desire to provide optimal resident education while being influenced by demands on time and balancing life considerations. Residency culture and expectations have shifted over time and attending wellness has been negatively impacted. Respondents expressed concerns that the current state of affairs is both unsustainable and inadequate in preparing residents for the realities of practice. Our results underscore the importance of balancing attending and resident needs to support effective educational activities.

OG-7-3 <u>Simulation program evaluation with multilevel</u> <u>longitudinal data: Comparing the designed, the delivered</u> and the experienced curriculum

Firas Gaida, Université de Montréal

Background/Purpose: Program evaluation is a standard in education quality, yet there remains a scarcity of literature addressing the process of conducting and reporting such evaluations, particularly in the context of educational simulations. We aim to present a comprehensive multilevel longitudinal program evaluation based on the Context, Input, Process, and Product (CIPP) model. We seek to identify the needs, challenges, and opportunities for improvement within an undergraduate medical simulation program.

Methods: Program evaluation questions and indicators were determined for each element of the CIPP model. Retrospective data from 2016-22 from 1st, 2nd, 3th, and 4th year medical students (N = 3682) was collected. This data comprised surveys featuring both closed and openended questions. Our analysis followed a quantitative descriptive approach. CIPP reports built upon five categories of simulation program quality including competences, simulation, instructional material, debriefing, and learning needs.

Results: Our findings brought to light disparities in the allocation of time spent in simulation activities among student from different levels; however, an even number of simulation scenarios exposition and an overall increase in debriefing time was found. Instructional material and debriefing sessions emerged as pivotal factors contributing to students' acquisition of communication and technical competencies during simulations. Significantly, students highly valued simulations for its possibility to help them identify their learning needs, suggesting a need for increased debriefing time and implementation of ongoing strategies to foster students' self-reflection.

Discussion: By adhering to the CIPP model and its systematic approach, simulations centers can better address the participants' evolving needs, ultimately improving the quality of educational simulations.

OG-7-4 Greater reciprocity means greater sustainability: A new format of community engaged learning at the University of Calgary, Cumming School of Medicine (CSM)

Lisa Yeo, University of Calgary

Background/Purpose: We move towards greater social accountability in undergraduate medical education (UME) by providing learning experiences with exposure to priority health needs, social determinants of health and cultural issues impacting community, and facilitating opportunities for learners to 'learn in context,' with a focus on equity-deserving groups (theNET, 2023). Community engaged learning (CEL) in UME helps to achieve this, but requires meaningful, mutually-beneficial, and sustainable relationships with community partners. Long-term, longitudinal formats of CEL enhance the sustainability of community partnerships.

Methods: CEL is integrated into the 3-year MD program at the CSM. To facilitate CEL for medical students, the Indigenous, Local and Global Health Office (ILGHO), in partnership with Undergraduate Medical Education, has developed and fostered relationships with local community organizations which serve equity-deserving groups. Community partner feedback propelled ILGH faculty and staff to revise the format of CEL, from an intensive, short-term (3 day) format to a long-term (1 year) format.

Results: Shifting the format of CEL towards a longitudinal model has allowed ILGHO to maintain 12 existing community partnerships and build a significant number of new partnerships (n= 35). Existing and new partners express that a longitudinal model greatly enhances reciprocity in the relationship, as students will be able to serve as a valuable resource to partners during CEL. This increases the partner's ability to participate in CEL and removes the burden of repeated student orientation that exists in a short-term format.

Discussion: The findings of this can support sustainability of CEL across medical schools in Canada.

OG-7-5 <u>Sculpting Surgical Safety: The Transformative</u> Power of Design Thinking

Elisabeth Normand, Canadian Medical Protective Association

Background/Purpose: Quality improvement efforts in healthcare often struggle to address the complexity of systemic challenges. Launched in 2019, the Canadian Medical Protective Association's (CMPA) Theatre Arts course introduces Design Thinking to empower surgical teams in addressing quality and safety issues. It places a strong emphasis on fostering psychological safety within teams, igniting innovation, and promoting a transformative approach to surgical safety improvements.

Methods: The Theatre Arts course, rooted in Design Thinking principles, engages surgical teams in real-world problem-solving through interactive workshops and collaborative exercises. A distinctive feature is the structured six-month follow-up, enabling teams to reflect on their learning with faculty guidance. Qualitative impact data collection supports ongoing assessment of outcomes.

Results: Participating teams have demonstrated significant improvements in safety and reliability within their work environments. An impressive 93% intend to share their newfound knowledge, with 97% expressing confidence in using course-acquired tools and resources to enhance surgical safety. Implementation of Design Thinking principles has enabled teams to effectively address complex challenges and introduce innovative solutions. The follow-up process captures valuable narrative data, revealing a profound impact on both individual and team levels. For instance, one team implemented a surgical time-out procedure involving over 100 colleagues within weeks. Another health authority reported zero never-events for three years postworkshop.

Discussion: This study underscores the importance of integrating Design Thinking in surgical safety. It fosters psychological safety, encourages innovation, and offers a practical strategy for lasting impact.

Block H

OH-1

EDI - Black Health and Wellness

OH-1-1 What we can learn from comments about 'residents these days'

Aishwarya Kulkarni, Western University

Background/Purpose: There is an increasing recognition that escalating demands of clinical practice can have a profound and, at times, negative impact on clinical trainees' professional development. Less clear, however, is how faculty perceive these developmental changes and their ideas of what can be done to mitigate against this.

Methods: Secondary analysis of a larger constructivist grounded theory study looking at the tensions and challenges, as perceived by faculty, on the Internal Medicine clinical teaching unit (CTU) focused on an emerging theme of 'residents these days'.

Results: Participants expressed a range of perceptions, from frustration and concern to sympathy. The greatest frustrations and concerns related to a trend towards treating clinical care as 'just a job' and teaching as an interruption to getting the work done, and a general undervaluing of clinical experience and apprenticeship as part of their education. Opinions, however, varied regarding how much of this apparent change was related to changing professional values versus fair response to the demands of being a resident in the changing face of medicine.

Discussion: Though frustration with younger generations is not a novel sentiment, perceptions of how exactly today's trainees are different raise important considerations that need to be addressed to reach the optimal state that participants desired — one where learners are enthusiastic about clinical care and learning. While it may be tempting to tackle the problem from the perspective of resident professionalism, all participants acknowledged the need to change the CTU environment to better ensure a balance between practice demands and resources.

OH-1-2 <u>Community Hypertension Outcomes</u> <u>Improvement by Computerized Education Seminars</u> (CHOICES) for the Black Community

Julianah Oguntala, University of Toronto

Background/Purpose: Cardiovascular risk factors, such as hypertension, disproportionately affect Black Canadians. Dietary interventions, such as DASH (Dietary Approaches to Stop Hypertension), have demonstrated significant systolic blood pressure reductions. The lack of cultural food considerations limits utility amongst Black populations. Culturally-relevant diet counseling has not been studied as a secondary prevention tool in hypertensive Black individuals.

Methods: We provided a free 4-week virtual seminar on hypertension management from a culturally-sensitive nutritional perspective to hypertensive Black adults. At baseline, upon completion and 4-weeks post-seminars, participants completed the University of Kansas Nutrition Literacy Assessment Instrument (UKNLAI) with an exit survey via RedCap. Impact of the seminars on dietary choices was assessed on the 5-point Likert scale.

Results: Preliminary results are based on 8 participants (61.3 \pm 8.3 years old). Highest education levels were high school (62.5%) then college or diploma (37.5%). 87.5% of the participants were immigrants and 33.3% had a yearly income <\$20,000. 71% or more participants reported learning how to make healthier dietary choices, read food labels and engagement throughout the seminars. 71% of participants reported DASH diet adherence increased weekly grocery costs but improved self-perception of making healthier diet choices.

Discussion: Providing culturally-relevant dietary seminars to Black adults with hypertension can promote dietary changes and may increase the feasibility of maintaining a healthy dietary pattern for long-term management. However, increasing grocery costs following the DASH diet present a potential barrier. Next steps include delivering the seminars to 25 participants and determining the impact on nutritional literacy.

OH-1-3 Exploring How First-Generation Immigrant Medical Students Experience Medical School on Academic and Social Levels

Negar Atefi, University of British Columbia

Background/Purpose: As the diversity of the Canadian population increases, medical schools are working to increase admission diversity as part of their social accountability mandate. However, first-generation immigrants (born outside of Canada) continue to be underrepresented in medical schools, and their experiences inadequately explored. We studied the academic and social experiences of the first-generation immigrant students (FGIS) at the University of Manitoba (UofM).

Methods: This study used a sequential, mixed-method approach, using survey methodology and semi-structured interviews. After ensuring face and content validity, the survey was distributed to all current medical students at the UofM. A statistical analysis of survey data and a thematic analysis of the interviews was conducted.

Results: Forty-two students completed the survey across four years of the program. Among respondents, 75% arrived in Canada before age 10. While 65.72% felt they belonged in medical school, 75.75% disagreed with adequate representation of their culture/ethnicity in class materials. In social settings, 61.29% of students reported a sense of belonging. Among the 10 interviewees, the following themes were identified: Time in Canada; Passing as White, and Feeling Different.

Discussion: We looked at the experience of FGIS in a Canadian Medical School. Although most students reported a sense of belonging, barriers to academic and social experiences varied depending on students' self-description of being from a visible vs. non-visible minority group. Student suggestions for improvement included education and action on equity, diversity, and inclusion principles for faculty and stakeholders.

OH-1-4 UGME Policy Review Using an EDI Lens

Aafia Magsood, University of Saskatchewan

Background/Purpose: The undergraduate medical education (UGME) policies were developed within Canada's colonial university system that has inherent systemic biases which do not fully represent all students. Structural racism is entrenched within the medical system which may hinder medical students' success and negatively impact experiences. This study's aim was to begin reviewing UGME policies focusing on EDI to address inherent biases and ensure equitable policies for UGME learners.

Methods: Students, staff, and faculty were invited to online and in-person focus groups, with a sample size of 21. Interviews were transcribed and a thematic analysis of the transcripts was conducted.

Results: In the interviews, students shared the inequities they have experienced ranging from racism, religious discrimination, and harassment to issues like cultural insensitivity, sexism, and barriers rooted in age and socioeconomic standing. Participants advocated for more professionalism, transparency, and clarity of UGME policies and their implementation. They suggested providing better reporting systems, including annual EDI summaries. Most importantly, students called for collaborative policy drafting and diverse representation on UGME committees.

Discussion: The feedback collected from focus groups will serve as a valuable foundation for re-evaluating UGME policies and practices to make them more equitable, diverse, and inclusive for UGME learners.

OH-1-5 <u>Disability in Health and Human Services Education:</u>
Negotiating the Barrier-Filled Path Between Patient and
Professional

Tal Jarus, University of British Columbia

Background/Purpose: Despite legislation mandating the accommodation of students with disabilities in post-secondary education, accommodations are often not implemented within health and human services (HHS) education programs, particularly in fieldwork settings. In this study, we examined how HHS students (medical students included) described their experiences seeking (or not seeking) accommodations in their fieldwork, to understand the facilitators and barriers encountered in obtaining accommodations during clinical placements.

Methods: Thirty-five students with various disability identities participated in 14 individual and seven group interviews. Using a critical disability studies framework, we examined what their perceptions of HHS fieldwork revealed about education how disability, accommodations, and professional competence are conceptualized within their institutions. Through a critical interpretive analysis of students' interview data, we developed first-person composite narratives to show the richness and complexity of the students' diverse, yet similar, subjective experiences with fieldwork accommodations.

Results: Two composite narratives demonstrate how conceptions of disability influenced student experiences with disclosing disability and obtaining accommodations in HHS fieldwork education. A third composite narrative, written as a dialogue between the two characters, demonstrates how the students' experiences of marginalization were constructed by ableist systemic structures within HHS education and practice.

Discussion: A medical model of disability creates institutional barriers that require students to constantly (re)construct their "professional" identity in relation to their "patient" identity and other intersecting identities. Implications for clinical education and practice include reworking competency standards, and teaching and enacting critical perspectives and critical reflection and reflexivity as an approach toward both equitable education and practice.

OH-2

Admissions - EDI

OH-2-1 Survey of Canadian Medical Schools Addressing Anti-Black Racism: Assessing Accountability in Canadian Medical Schools Amidst Expanding Black Admissions Pathways

Samah Osman, University of Toronto

Background/Purpose: As Black admissions pathways (BAP) expand across the 17 Canadian Faculties of Medicine (CFoM), the level of accountability within these institutions remains unclear. To address this knowledge gap and assess whether the institutions' accountability practices align with the increasing number of BAP, we conducted an environmental scan.

Methods: Our survey, facilitated by BMSAC, N-ABL, and the AFMC EDI-AR Committee and offered in both English and French, featured a combination of multiple-choice questions and short-answer sections. Responses were transformed into numerical scores on a scale from 0 to 100%, which were then categorized using a color-coded system. We assessed accountability by surveying schools to determine the extent to which they had implemented measures such as improved data collection practices, strategic inclusion planning, efforts to increase the representation of Black instructors, and assessments of the learning environment.

Results: All 17 CFoM completed the survey. Our analysis revealed varying commitment levels across admissions and accountability domains. In terms of admissions, 82% of institutions earned a green rating (80-100%), 12% earned yellow (50-79%), and 5% earned red (0-49%), suggesting a positive outlook for Black medical student access. However, in the context of accountability, 59% of schools received a red rating, 5% scored yellow and 35% demonstrated notable progress with a green rating.

Discussion: In light of the increasing number of BAP, our study reveals a critical need for enhanced accountability measures to align with the commitment to inclusivity and ensure equitable outcomes for Black medical students.

OH-2-2 National Consortium for Indigenous Medical Education (NCIME) Admissions and Transitions Working Group: Environmental Scan and Tool Kit for Addressing Indigneous Admissions in Canadian Medical School Admissions

Alexandra Nychuk, National Consortium for Indigneous Medical Education

ackground/Purpose The National Consortium for Indigenous Medical Education (NCIME)'s Indigenous Student Admissions and Transitions Working Group (ATWG) is a collective of Indigenous and non-Indigenous medical education experts working to address the chronic underrepresentation of Indigenous medical doctors in Canada. In 2016, Canadian Census reported that 760 of the 93,985 of physicians in Canada are Indigenous, asserting that Indigenous physicians account for less than 1% of physicians in Canada. (Statistics Canada, 2016; Dhont, Stobart, Chatwood, 2022).

Methods: To address this gap during 2022 the ATWG conducted an environmental scan examining Canadian Medical School Indigenous Application processes using front facing data accessible through the institutional websites. This environmental scan in combination with ATWG's expertise was used to develop a toolkit of recommendations for medical schools to address this dearth in both in UGME and PGME.

Results: The comprehensive and longitudinal toolkit spans across all five stages of a physician's life course, starting at elementary school and continuing into professional development, and paying particular attention to gaps faced by Indigenous students transitioning into PGME and UGME entrance requirements for all applicants. The toolkit gave way for the ATWG to develop a Reporting Framework to be implemented in conjunction with the NICME's data strategy to better understand Indigenous experiences within the application process.

Discussion: This comprehensive list of recommendations is the first of its kind in Canada and could serve as a valuable resource for any medical school or governing body looking to diversify its admissions and transmissions processes using a holistic social determinants approach.

OH-2-3 <u>UBC's Outreach Ambassador Program: Fostering</u> Diverse Representation in Medicine through Connection

Catherine Macala, University of British Columbia

Background/Purpose: North American medical schools admit more socially privileged and less racially diverse students than the population at large. There are many factors leading to this disparity, but one is that medicine can seem like an unattainable career for individuals who do not see themselves in the typical representations of doctors within healthcare spaces. This lack of representation is likely a strong influence on who decides to apply to medical school.

Methods: Through presentations and community events, the Outreach Ambassador Program connects current medical students with high school students, emphasizing outreach to students who come from non-traditional backgrounds. Predicated on the belief that the sooner students understand what medical school and a career in medicine involves, and how to approach the admissions process, the more likely they will be to forge a career trajectory towards medicine. Ambassadors aim to dispel common myths and enlighten underrepresented youth about how they can embrace their diverse paths to becoming a physician.

Results: Ambassadors have conducted 163 school visits, connecting with approximately 4500 students across 116 different secondary schools throughout BC. Survey feedback demonstrates positive and rewarding experiences, with counsellors and high school students hoping for more presentations and access to ongoing mentorship in the future.

Discussion: Preliminary results indicate that students, counsellors, and ambassadors benefit from early connection and interaction. In creating ambassador programs, universities may be able to utilize the power of the student voice and experience to inspire students, currently under represented in medicine, to strongly consider forging a path towards a career in medicine.

OH-2-4 Price of a Dream: Lessons Learned from a Mixed Methods Program Evaluation of the Ontario Medical School Application Fee Waiver Pilot Program

Claudine Henoud, University of Ottawa

Background/Purpose: The costs associated with Canadian medical school applications is a financial barrier for applicants from low socioeconomic status (SES) backgrounds. In 2021, Price of a Dream (POD) collaborated with provincial and national stakeholders to address this financial barrier and implemented the Medical School Application Fee Waiver Program (MSAFWP), a subsidy program to waive costs associated with the medical school application. The program was piloted in Ontario, and consequently expanded to Alberta and Saskatchewan.

Methods: In the 2022-2023 application cycle, POD conducted a program evaluation of the Ontario pilot program using a mixed method survey for quality improvement purposes. Applicants to the waiver program and attendees of information events were recruited.

Results: We had 82 survey respondents of a total 320 applicants (26%). Respondents reported that medical school applications were a significant financial barrier, and that the Ontario pilot program made it financially easier to apply; reducing the financial burden of the application process, and relieving financial stress. The voucher reduced the total cost of the application process most frequently by 70-79%. 78% of respondents stated that they could afford to apply to more medical schools as a result of the voucher. Respondents were satisfied with program support, but identified ongoing barriers such as stigma related to finances and challenges with determining eligibility.

Discussion: The Ontario pilot program decreased financial barriers to medical school applications. Next steps include quality improvement efforts to address stigma and eligibility challenges, evaluating Alberta and Saskatchewan programs, and exploring long term outcomes.

OH-2-5 Are we there yet? Critical discourse analysis of student feedback on Service Learning

Barbara Borges, University of Ottawa

Background/Purpose: Service Learning (SL) is a curricular requirement for undergraduate medical education students at the University of Manitoba (UM), and draws on Mitchell's (2008) principles of Critical Service Learning (CSL). Reflective exercises "for marks" may bias student responses. Summative course feedback is not graded, providing a forum for more candid expression. This project analyzed anonymous, summative feedback about how students' experiences and perceptions of SL aligned with Mitchell's CSL principles.

Methods: Surveys from years 2(n=69) and 3(n=70) reflecting on the previous year were analyzed. In addition to the standing review of this data, we explored how it tracked with Mitchell's principles. We mapped each of the 22 survey questions to Mitchell's principles then used critical discourse analysis methods to identify emergent themes and dominant discourses within the narrative data. Within each principle, questions' themes and dominant discourses were considered in aggregate to explore (mis)alignment with CSL principles.

Results: We have identified interesting preliminary emergent themes: multiple students described the purpose of SL is to "help" the community; fewer students used language such as "work alongside", "work in solidarity with", or "learn from" community. Language describing SL as "extra-curricular" does not reflect that SL is a curricular requirement and may serve to diminish its importance and/or curricular validity.

Discussion: These results will identify areas of strength, gaps and opportunities, to more effectively advance Mitchell's principles of CSL. Applications of these results will directly inform revisions to the SL student orientation, and modifications to existing reflective assignments to better reflect and incorporate Mitchell's principles.

OH-3

Physician and Medical Student Health and Well-being OH-3-1 Beyond the White Coat: Unveiling Physician Grief with Discourse Analysis

Tanya Jain, Dalhousie University

Background/Purpose: Grief is a ubiquitous, but often challenging, aspect of working in healthcare. The continuous exposure to grief can take a heavy toll on physicians, yet conversations acknowledging physician grief seldom occur in clinical settings. Keen to delve into the reasons behind this phenomenon, we initiated an exploration into the various ways physicians talk about and manage their grief.

Methods: We interviewed physicians (n=12) and residents (n=5) across various practice locations, specialties, and career stages. We used the tools of discourse analysis to investigate the ways in which participants used language to engage in, question, or resist pervasive discourses of grief.

Results: Physicians acknowledged that grief is widely overlooked in the clinical workplace. Many tended to set aside their grief to prevent it from impacting their work, or to avoid overburdening their colleagues. Fears of being perceived as psychologically unwell required physicians to adopt an emotional armor. Frustration surrounding the stigmatization of grief served as a catalyst for physicians to reevaluate their roles as health care providers.

Discussion: Although grief and loss are unavoidable in medicine, our findings indicate that expressions of grief tend to be stifled in the clinical workplace. Further work is required to educate physicians and leaders about the innate tensions that exist between the personal dimensions of loss and physicians' professional roles.

OH-3-2 The Self-Inflicted death of the nineteenth century "Medical Man": what can physician suicides' past teach us about studying burnout today?

Rabia Khan, University of British Columbia

Background/Purpose: Without understanding it's history, medicine may be doomed to repeat it. I examined how physicians became an object of inquiry by their profession when Dr. William Ogle first quantified physician suicide as part of the British Census. The purpose of this study was to determine how the 'undefined medicalization' of 'suicide' created the historical a priori to the current discourses of burnout.

Methods: Using a genealogical approach, I used Foucault's (2004) four processes for undefined medicalization to describe the biopolitics of public health in England by analyzing Dr. William Ogle's 1886 report on Statistics of Mortality in the Medical Professions, its reception by other physicians, and its dispersion in medical journals including the British Medical Journal.

Results: This study demonstrated that an undefined medicalization of suicide occurred through a) the role of Dr. William Farr and Dr. William Ogle as authorities who b) classified and taxonomized the human species with greater categories within their research linking occupation to death in order to c) bring public health into academia, and this led to d) the scientization and statisticization of knowledge about death to inform the governance of life.

Discussion: The scientization, rooted in public health and rationality, that informed which deaths were being recorded, by whom and for what purpose remains the dominant way in which mortality statistics are used today (at the exclusion of other ways of knowing). This study has implications for how medicine as a profession is currently studying burnout and offers insight into physician suicide, beyond its quantification.

OH-3-3 <u>Problematizing the concept of trauma in medical</u> <u>education</u>

Amanda Roze des Ordons, University of Calgary

Background/Purpose: There is good evidence to show that medical students and residents are at particular risk of psychological trauma. Despite the consequences of trauma for learning, performance, and mental health, research on medical learners' psychological trauma is underdeveloped. Our purpose was to identify metanarratives of how trauma has been conceptualized within medical education.

Methods: A metanarrative review was conducted following RAMESES reporting guidelines. A search of Medline, Embase, Psycinfo, ERIC, Education Research Complete, CINAHL and SocIndex using search terms relating to trauma and psychological distress, and medical education, clerkship, and residency education identified 7,280 articles. Using purposive and theoretical sampling, title/abstract screening, and full-text review, 56 articles met inclusion criteria. Study characteristics and findings were extracted and an interpretive lens applied to identify metanarratives.

Results: Most studies were published after 2015 (68%), conducted in the United States (59%), and were quantitative (64%). Trauma metanarratives included biomedical vs sociocultural framing; diagnosis vs experience; and trauma as an event, the response to an event, or injury related to that response. The majority of research clustered around biomedical, diagnostic, and event-related conceptualizations of trauma.

Discussion: Trauma in the medical education literature has been strongly conceptualized as a biomedically defined and individual issue understood through epidemiologic methods of research. This approach risks erasing, delegitimizing and stigmatizing individual experiences while ignoring sociocultural, intersectional and structural dimensions of trauma. These lenses offer important insights both for future research and for frontline medical educators, particularly those involved with resident wellness and resilience.

OH-3-4 <u>Validity</u> and reliability of commonly used scales to measure medical student wellbeing longitudinally: a COSMIN-based systematic review

Henry Li, University of Alberta

Background/Purpose: Psychometric scales used to measure medical student wellbeing longitudinally have shown variable validation. Our study aimed to summarize and assess the validity and reliability evidence of the most common scales employed to measure medical student wellbeing longitudinally.

Methods: A systematic review was conducted using COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN). Seven databases and gray literature were searched for psychometric studies in medical students for 52 scales measuring 13 different wellbeing constructs ranging from anxiety to work-related wellbeing. Review reference lists were handsearched. Screening and data extraction were done independently by two reviewers with conflicts resolved via consensus. Study quality and psychometric properties were assessed using COSMIN methodology.

Results: Of the 3666 studies screened, 133 met the inclusion criteria with psychometric data on 38 scales. There was evidence to support internal consistency for 34 scales, structural validity for 18 scales, test-retest reliability for 13 scales, and construct validity for 33 scales. There were few scales that had evidence of content validity support (n=5), cross-cultural validity (n=5), and responsiveness (n=6) in medical students. Study quality varied widely amongst the included studies and only 19 reported participant race/ethnicity.

Discussion: Despite widespread use of psychometric scales to measure medical student wellbeing longitudinally, many lack validity and reliability evidence in medical students. There is an ongoing need for high-quality psychometric studies to support the use of wellbeing scales amongst current learners, particularly given the increasing diversity of the medical profession.

OH-3-5 <u>Illness Presenteeism Among Physicians and</u> Medical Trainees: A Scoping Review

Lorenzo Madrazo, University of Ottawa

Background/Purpose: Illness presenteeism (IP) is the phenomenon where individuals continue to work despite being sick. IP is prevalent among physicians and trainees despite a myriad of negative consequences including burnout or infection spread—concerns particularly salient during the COVID-19 pandemic. Thus, we conducted a scoping review to advance how we understand and address this longstanding yet intuitively concerning practice.

Methods: The Arksey and O'Malley framework was used to systematically select and summarize the literature. Searches were conducted across four databases. Quantitative and thematic analyses were conducted.

Results: Of 4,277 articles screened, 45 were included of which four were post-pandemic. Studies framed IP as problematic for physicians, patients, and healthcare systems. Dominant sociocultural drivers included obligations towards patients and colleagues and avoiding the stigma of appearing vulnerable. Structural factors included heavy workload, poor access to health services, and lack of sick leave policies. Proposed solutions ranged from education-based interventions to policy-driven changes.

Discussion: Despite being heavily problematized, IP remains rampant, even during the pandemic where the spread of infection was of heightened concern. Moreover, physicians engaging in IP do so knowing that it is problematic, and yet, many of the proposed solutions focus on education-based interventions that place the burden of change on physicians. Given that IP is a complex phenomenon driven by multiple actors beyond individual physicians, solutions should instead focus on addressing cultural and structural issues. Future research should be mindful of IP's complexity and be enriched by theory-based approaches to inform practical solutions.

OH-4

Teaching and Learning - Indigenous Health

OH-4-1 Improvements to physician attitudes and confidence with land-based Nehiyô miyomahcihowin ekwa kiskinwahamakosiwin ("Cree Health and Learning") for postgraduate residency programs

Carol Hodgson, University of Alberta

ackground/Purpose There is a critical need for healthcare providers to develop knowledge and skills to address Indigenous health issues and foster culturally safe environments. This project piloted a decolonizing land-based Indigenous Health learning experience to help meet TRC Calls to Action. We evaluated whether this pilot improved attitudes towards learning about Indigenous health and confidence in personal knowledge of Indigenous health.

Methods: The half-day curriculum was designed and delivered in an Indigenous ceremonial space, outside the university by local Indigenous physicians, scholars, Elders and Knowledge keepers with 3 residency programs. Preand Post-session surveys were emailed to registrants. Two composite scores were calculated: Attitude (openness to learning about Indigenous health) and Confidence (personal knowledge/skills pertaining to Indigenous health). Paired t-tests were used for pre/post scores. Independent t-tests were used for pre/post score differences by demographic variables.

Results: Fifty-two residents and faculty attended; 39 submitted both pre- and post-surveys. Ninety-five percent rated the workshop overall quality as "very good" to "excellent." Attitude scores increased (t=3.82, df=38, p<.001) from pre (M=30.97, SD=4.57) to post (M=32.85, SD=4.08) session. Confidence scores increased (t=6.49, df=38, p<.001) from pre (M=21.51, SD=3.32) to post (M=25.33, SD=2.74). No significant pre/post score changes found between groups by gender, visible minority, or residency level.

Discussion: This pilot demonstrates land-based learning outside the academy is well received and can have positive impacts on participant openness to learning about Indigenous health and confidence in personal knowledge and skills in this domain. Such curricular innovations are a step towards responding to TRC calls to action for reconciliation.

OH-4-2 <u>Disrupting or Maintaining the Status Quo?</u>
<u>Exploring Non-Indigenous Learners' Engagement in</u>
Reconciliatory Work

Obinna Esomchukwu, Dalhousie University

Background/Purpose: As efforts to promote Indigenous equity in medical schools gain momentum, the focus primarily centers on institutional policies and faculty actions. While these elements are undeniably important, the involvement of non-Indigenous students remains an overlooked aspect. Understanding their engagement with Indigenous equity is vital as they shape the future of healthcare. This study explores experiences of non-Indigenous students actively involved in delivering on the Truth and Reconciliation Commission's (TRC) calls to action.

Methods: Data collection and analysis were informed by narrative inquiry, a qualitative methodology that emphasizes depth over breadth. We interviewed non-Indigenous medical students (n=5) and a graduate student (n=1) actively involved in reconciliatory efforts.

Results: Students felt conflicted about their engagement in reconciliatory work. They recognized being beneficiaries of colonialism and desired to use their privilege to speak out against anti-Indigenous racism. Yet intervening when they witnessed unfairness or undue scrutiny against an Indigenous peer or patient proved challenging, especially in situations where the student desired a favorable evaluation from their preceptor. The prevailing tendency in such situations was to avoid disrupting the status quo.

Discussion: Non-Indigenous students struggle to navigate a system calling for transformation yet rife with historical and institutional barriers. This struggle often arises from the discomfort stemming from their privilege and a sense of limited influence within the medical hierarchy. Our study reveals the internal conflicts and institutional hurdles students confront in advancing truth and reconciliation.

OH-4-3 Enseigner et évaluer les habiletés de communicateur des apprenants en médecine dans un contexte de formation sur les directives anticipées de fin de vie: une revue systématique de la littérature

Salomon Fotsing, University of Ottawa

Background/Purpose: Les étudiants et résidents en médecine sont confrontés aux discussions portant sur les directives anticipées de fin de vie (DAFV) avec leurs patients. Ces derniers doivent donc développer des habiletés communicationnelles sur les DAFV afin de mieux discuter avec leur patient. De nombreuses stratégies sont utilisées pour enseigner ces habiletés aux apprenants. Quelles sont les meilleures pratiques pour enseigner la compétence de communicateur sur les DAFV aux étudiants et résidents ?

Methods: Une revue systématique a été menée selon AMSTAR-2 à travers les bases de données MEDLINE, EMBASE, CINAHL, PsycINFO, Eric, Education Source ainsi que dans la littérature grise. Par la suite elle a été rédigée suivant les lignes directrices PRISMA.

Results: Sur les 1358 articles obtenus, 21 ont été inclus et 10 études ont démontré une preuve d'efficacité de l'intervention. Les stratégies les plus efficaces étaient de types actives notamment : les discussions en petits et grands groupes, les séances de clinique simulée, des études de cas, des ateliers participatifs, des jeux de rôle, des immersions réelles en milieu clinique, des apprentissages par cas.

Discussion: Les stratégies actives semblent efficaces, mais ne se valent pas, car par exemple, les groupes de discussion engagent le dire, le partage du dire, la discussion des informations tandis que la simulation engages le corps et les gestes. La simulation semble plus réaliste, mais ne convient pas aux étudiants introvertis et discrets. Des études comparatives de stratégies et/ou tentant d'harmoniser les contenus de cours (ex. méthode Delphi) pourraient être bénéfique

OH-4-4 <u>Medical terminology in a bilingual country: un</u> dialogue de sourds?

Mélanie Houle, University of Ottawa

Background/Purpose: Le Québec, seule province majoritairement francophone au Canada, subit fortement l'influence de l'anglais. Aussi la communauté médicale y est-elle confrontée à un défi linguistique complexe et polymorphe. En tant qu'enseignante de terminologie médicale française à l'Université d'Ottawa, une institution bilingue, je suis très consciente de ces problèmes, mais aussi des stratégies qu'il est possible d'adopter pour y remédier. Mon approche de la terminologie et de son enseignement s'appuie pour une grande part sur l'application de formules dans lesquelles les formes composées s'additionnent à l'intérieur des mots selon une logique scrupuleuse pour former un sens précis et prévisible. La signification d'un terme, qu'il soit anglais ou français, devrait apparaître clairement dès lors que les étudiants connaissent la signification des radicaux. Cependant, en analysant la traduction ou la formation de termes supposés équivalents pour certains concepts anatomiques et cliniques, on constate que diverses difficultés peuvent survenir. En effet, d'une langue à l'autre, on ne suit pas toujours les mêmes règles morphosémantiques.

Methods: Pour le projet d'implantation du cours de terminologie dans les deux langues officielles à l'Université d'Ottawa, j'ai d'abord produit une adaptation française d'un manuel anglais, processus au cours duquel j'ai pu relever les difficultés et les pièges les plus courants. En second lieu, depuis 2019, avec les étudiants, je continue d'en collecter et collationner les exemples.

Results: J'ai identifié cinq principales catégories de problèmes que rencontrent souvent les étudiants lorsqu'ils transposent des termes d'une langue à l'autre.

Discussion: Il faut porter une attention particulière au français médical au Canada.

OH-4-5 The CASPER Prep Program Evaluation: Impact on underrepresented Applicants Knowledge and Preparation for the CASPER test

Dana Tabet, University of Ottawa

Background/Purpose: The CASPER Preparation Program (CPP) is a free medical student-led initiative which provides coaching to Underrepresented Minorities in Medicine (URMMs) in preparation for the Computerbased Assessment for Sampling Personal Characteristics (CASPER). CASPER is a situational judgment test required by medical school admissions committees. Established five years ago with curricula improvements implemented yearly, previous studies have demonstrated that URRMs' knowledge and self-perceived competence towards CASPER and its snapshot increased with CPP. This study aims to continue to evaluate CPP's structure and students' satisfaction level to inform future curricula improvements.

Methods: Pre- and post-program questionnaires were completed by participants, assessing their knowledge of ethical principles and preparation levels in taking the test. In the post-questionnaire, the overall assessment of CPP, course/homework load, structure, strengths, and areas of improvement were also assessed. Questions consisted of Yes/No scales, 5-point Likert scales, and open-ended questions.

Results: Pre- and post-program questionnaires were completed by 228 and 70 students, respectively. Preliminary findings suggest self-perceived confidence of participants in recognizing ethical principles increased (26.3% to 59.7%). Similarly, before taking CPP, the majority of participants agreed that they were ill-prepared to write the test (53.9%) whereas after CPP 40.3% agreed they were prepared. CPP was overall assessed as excellent (40.3%) and very good (48.6%).

Discussion: CPP continues to improve participants' knowledge regarding CASPER preparation and their self-perceived confidence in writing the test. Iterative evaluation of CPP is critical to improving its structure and to further improving URRMs' preparation in applying to health professional careers.

OH-5

Curriculum - Indigenous Health

OH-5-1 Bridging Gaps in Primary Care: Developing E-Modules and Work Integrated Physician Assistant Enhanced Skills Training for the care of Underserved Populations

Kristen Burrows, McMaster University

Background/Purpose: Access to quality primary care for underserved patient populations is an ongoing healthcare challenge. To address this gap, we designed a comprehensive educational program comprised asynchronous e-modules and in-person clinical training aimed at equipping physician assistants (PAs) with enhanced skills in five underserved domains: Indigenous health, refugee health, mental health, substance use health, and care of the older adult/long term care.

Methods: Our study involved the collaborative effort of healthcare educators, content experts, and an instructional designer to create a series of interactive emodules. These modules encompass evidence-based practices, cultural sensitivity, and interprofessional approaches for each of the five underserved domains. Additionally, 30 PA trainees completed work integrated training in these domains, applying their knowledge in real-world settings.

Results: We will describe the process of e-module development for each of the five domains through the lens of a PA in primary care. The relevance of the modules' content and the resulting impact on PA understanding and confidence to provide care to these underserved populations will be reviewed.

Discussion: Our study provides an innovative approach to enhanced skills training in the delivery of primary care to underserved populations. It elucidates the potential to incorporate PAs into the service delivery for these much-needed areas of primary care through tailored continuing education. The work-integrated training component enabled the consolidation of theoretical knowledge with practical skills. As the demand for culturally competent and specialized primary care providers grows, our program offers a promising model for healthcare education, ultimately improving healthcare access and outcomes for vulnerable communities.

OH-5-2 <u>Survey of Canadian Medical Schools Addressing</u> Anti-Black Racism: Curriculum Review

Khadija Brouillette, McGill University

Background/Purpose: The commitment to an anti-Black racism curriculum is under review across the 17 Canadian Faculties of Medicine (CFoM). An environmental scan was of utmost importance to gain further insight into the progress made in response to Black Medical Students' Association of Canada (BMSAC) 2020 recommendations. Our study explored the current national landscape of anti-Black racism initiatives and identified areas where further efforts are required for Black learners in medical education.

Methods: 17 CFoM representatives completed our survey, which was facilitated by BMSAC, N-ABL and AFMC EDI-AR Committee. The survey was administered in English and French including multiple-choice questions and short answers. Categorical responses were converted to a numerical grading score (0-100%), followed by a colorimetric system. All scores were compared to the BMSAC 2021 report cards.

Results: Of the 17 CFoM that responded, 64% received a green rating (80-100%), 17% a yellow rating (50-79%), and 17% a red rating (0-49%). Compared to the 2021 BMSAC recommendations, 52% schools received a better score, 23% remained the same, and 23% regressed in the schools' efforts to address Black health in their curricula. Schools showing progression, implemented changes such as removing race as a proxy for determinants of health, training students in recognizing pathologies in different skin tones, and race-related vignettes without biases. Notably, many schools had not yet implemented standardized patient programs with intentional inclusion of Black peoples.

Discussion: Our findings highlight strides made in improving curriculum along with the need for continued monitoring and feedback to ensure sustained progress in anti-Black racism curriculum reform.

OH-5-3 <u>Culinary Medicine and Teaching Kitchens:</u> <u>Innovative Nutrition Training for Resident Physicians</u>

Jenny Xue, Northern Ontario School of Medicine

Background/Purpose: Using Teaching Kitchens (TKs), culinary medicine is widely implemented in American medical education as innovative, experiential learning that may improve nutrition competency compared to didactic curriculum. This project evaluated the impact of an in-person TK on Canadian family medicine (FM) residents' nutrition counselling skills, attitudes toward nutrition care, and preferred mode(s) of nutrition training.

Methods: One 2.5-hour mandatory session for 20 FM residents from NOSM University was delivered by a registered dietitian (RD)/Chef, family physician and RD. Residents prepared 12 recipes based on Canada's food guide followed by group discussion and a shared meal. Using Likert-scaled and open-ended questions, pre, post and two-month post-surveys assessed change in nutrition counselling skills, attitudes, and confidence; post and post-post also assessed effectiveness of individual session components and further training needs among residents.

Results: Eighteen completed the pre-survey, 14 attended the session. Eleven and nine completed post- and post-post surveys respectively. Positive shifts were seen in nutrition counselling skills, attitudes, and confidence, with statistically significant improvements in confidence helping patients eat well on a budget (p=0.04), motivational interviewing on healthy eating (p=0.001), and motivational interviewing at 2 months (p=0.009). Cooking and the shared meal were noted as the most enjoyable session components.

Discussion: Culinary medicine using TKs is effective and engaging for nutrition training, which remains limited in medical education. Since diet is a leading risk factor for disease, physicians should support patients with nutrition counselling. Given limited curriculum space in undergraduate MD programs, hands-on nutrition training targeting residents is a novel approach to addressing this gap.

OH-5-4 A Framework for Integrating Structural Competency into Physician Leadership Curricula

Sophie Soklaridis, Centre for Addiction and Mental Health; University of Toronto

Background/Purpose: Diversity in medical leadership is associated with increased innovation and reduction in health inequities. One approach for increasing leadership diversity is to provide training on equity, diversity and inclusion (EDI). However, a 2021 environmental scan indicates a dearth of nuanced EDI content in physician leadership programs in Canada and the USA. Moving forward, we propose embedding structural competency into physician leadership curricula for building capacity to identify and address structural inequities in medicine.

Methods: The framework draws on key physician leader competency frameworks, guiding documents and a literature review on structural competency. Work was guided by an advisory group with demonstrated leadership in equity, diversity, inclusion and anti-racism (EDIA) and/or experience with physician leadership programs.

Results: Expanding on Metzl and Hansen (2014), we define structural competency for physician leaders as the knowledge, skills and attitudes required to lead structural change in clinical workplace, medical education, research and academia. Key enabling competencies include: 1. Recognize/reflect on personal biases, assumptions and perceptions 2. Challenge inequitable policies and practices in education, workplace, academia and health care 3. Integrate EDIA in teaching, training and mentoring 4. Promote recruitment and promotion underrepresented groups 5. Support research, collection and use of EDIA data 6. Enhance equity in access, quality and outcomes of care 7. Allocate resources to improve equity 8. Build partnerships with organizations and leaders representing marginalized groups 9. Demonstrate inclusive and compassionate leadership.

Discussion: This framework provides practical guidance on integrating structural competency into physician leadership curricula required to mobilize structural change in medicine.

OH-5-5 <u>Innovative undergraduate electives curriculum in</u> Indigenous Health Needs Assessment

Dhwani Bhadresa, McMaster University

Background/Purpose: The purpose of this needs assessment is to determine the design, supervision format, feasibility, and student evaluation metrics of an Indigenous Health Elective, we hope to identify current barriers and challenges to design and delivery. Without a clear picture of the training medical students need to combat racism in healthcare and build on a foundation of knowledge from Indigenous learners, patients, and healthcare providers, elective opportunities will continue to reinforce colonial medical hierarchies and fail to prepare medical students to effectively serve Indigenous communities.

Methods: Focus groups and interviews were conducted by Indigenous members of the research team using conversational methods, allowing for the co-creation of knowledge between study participants and the researchers. Meaning saturation will be assessed using an inductive thematic saturation approach where saturation will be determined when there are few or no new themes being introduced into the data. Qualitative variables will be reported using data themes and non-identifiable quotes.

Results: The preliminary findings illustrate two overarching concepts identified by both medical students and faculty participants: (1) relearning and unlearning and (2) cultural competency, which are in line with Indigenous and cultural competency frameworks.

Discussion: Understanding and centring Indigenous knowledge and ways of knowing to reflect historical narratives that expose health inequities, colonialism, and racism. This provides insight into the knowledge of current Indigenous Health Practices, identifies opportunities for change and for additional integration of resources in the design of a future clinical Indigenous Health elective for undergraduate medical students.

OH-6

EDI - Black Health and Wellness

OH-6-1 <u>Self-identification Survey to capture Diversity</u> <u>Snap-shot of our Department's Faculty</u>

Umberin Najeeb, University of Toronto

Background/Purpose: Progress towards an institutional goal of diversity and inclusive excellence can not be measured without knowing what we look like. Demographic data has not historically been collected in academic medicine in Canada.

Methods: The inaugural self-identification survey was developed using a scholarly approach with careful consideration around language of the survey questions to comprehensively capture the snapshot of diversity of Department of Medicine's (DoM) faculty at University of Toronto. Self-identification data was collected completely anonymously and reported in an aggregate form to ensure confidentiality. Response rate was 36%.

Results: Of the respondents, 48% self-identify as white, 15% as East Asian, 14% as South Asian, 2.3% as Black and 0.9% as Indigenous. One-third of our respondents were born outside Canada, 28% completed their medical training outside North America, and our faculty speak more than 31 languages. 44% self-identified as women, 53% as men, and 1.4% as transgender or non-binary. One in five respondents was < 40 years of age with 23% having caregiver responsibility. 18% identified as having grown up in a low income family. 25% indicated that they were 'definitely' or 'probably' identifiable as a member of a specific religion based on their appearance/something they wear. Compared to Toronto census data, women, Black, Indigenous, Filipino people, and lower-income families are under-represented in the department. Greater efforts for religious accommodation and caregiver responsibilities are needed to enhance department diversity efforts. DoM is using survey information to ensure that our academic spaces are representative of the learners we educate and the communities we serve.

OH-6-2 Advocacy and Resistance: Faces of the same coin?

Maria Hubinette, University of British Columbia

Background/Purpose: CanMEDS positions health advocacy as an area of competence for all Canadian physicians. Resistance, however, does not hold the same legitimacy in medicine, and is often seen as unprofessional. The authors have explored how advocacy and resistance converge and diverge in the context of medical education and the implications thereof.

Methods: Parallel discourses of advocacy and resistance in the medical education literature were explored in a conceptual review of the literature. From this, the authors outlined a conceptual space defined by a series of tensions, articulated as ways of situating particular acts and rhetorical positions.

Results: The authors characterize the tensions between advocacy and resistance as six dyads: scope and scale, goals and intentions, effort and risk, disobedience and confrontation, responsibility and commitment, and consequences and outcomes. Rhetorically, 'advocacy' is associated with legitimate and professional practices while 'resistance' is associated with subversive practices. The use of either term can be used to confer or remove a sense of legitimacy to what are essentially the same actions.

Discussion: By scrutinizing concepts of resistance and advocacy in medical education, the authors seek to settle some of the tensions and areas of uncertainty, and to evolve thinking about these concepts. They argue that advocacy and resistance are not discrete categories, but discursive positions. Further, there are common factors that need to be interrogated to properly understand the advocacy-resistance landscape in healthcare and medical education and to better guide learners in the role of advocacy and resistance in their professional lives.

OH-6-3 Comparing Promotion Documents in Faculties of Medicine (FoMs) in Canada: An Institutional Ethnography Textual Analysis

Sophie Soklaridis, Centre for Addiction and Mental Health; University of Toronto

Background/Purpose: There are many inequities in the promotion process in academic medicine. These processes are often characterized by a lack of transparency and dissensus related to research excellence criteria. In order to increase promotion process equity, there is a need to understand the institutional policies and practices that produce these disparities. Using an institutional ethnography (IE) approach, we will examine how promotion documents ('texts') in academic medicine mediate institutional promotion processes across different Faculties of Medicine (FoMs) in Canada. This presentation covers the first phase of a 4-phase study.

Methods: Phase 1 of this work includes a preliminary textual analysis of promotion texts from the 17 FoMs in Canada. As a first step we located relevant texts by searching institutions' websites before performing a textual analysis comparing indicators related to promotion. The findings from the textual analysis will inform subsequent study phases, where we will situate texts within the broader institutional context to explore how they shape decision-making in promotion.

Results: Phase 1 textual analysis will explore and compare the various promotion criteria, pathways, and application requirements of FoMs in Canada. This will include an examination of the presence and nature of 'traditional' indicators of excellence across promotion texts.

Discussion: Our study findings hold significant implications for addressing inequities within promotion processes. This project will play a pivotal role in preventing information silos and fostering cross-institutional knowledge sharing. It is anticipated that insights from Phase 1 will contribute to the development of national guidance on developing fairer and more inclusive processes in academic medicine.

OH-6-4 <u>Twitter and Social Awareness: How Medical</u> Schools are Displaying Critical Consciousness on Social Media

Eray Yilmaz, Western University

Background/Purpose: In the digital age, social media profoundly influences discourse. Medical schools serve a unique role in shaping public awareness and opinion within healthcare, especially on platforms like Twitter. We explored how schools, acting as agents of change, utilize Twitter to articulate critical consciousness (CC)—defined as an acute awareness of societal inequalities and power dynamics.

Methods: A codebook was developed based on a review of CC literature. All tweets from March 22 – June 22, 2023 from all available Canadian medical school Twitter accounts were obtained and deductively coded. First, a content analysis was performed to explore the sub-types of CC, followed by a critical discourse analysis to examine the role of language in conveying social awareness.

Results: 3442 tweets were reviewed, of which 554 tweets displayed CC (16.12%). Our content analysis revealed that Empowerment of Marginalized Populations was the most prominent CC sub-type displayed (n=2867), whereas there was a paucity of messaging around Intersectionality (n=17) and Resistance to Oppression (n=42). Our critical discourse analysis revealed that language was purposefully used to positively spotlight equity-deserving individuals (e.g. "celebrate" and "recognize") with minimal dialogue framing institutions as agents of systemic power differentials.

Discussion: Medical schools display CC on Twitter. By focusing on Empowerment of Marginalized Communities and language that commemorates the injustices faced by these communities, they contribute to positive change and advocate for groups that are sidelined; however, the limited attention to Intersectionality and language about power dynamics reveals a missed opportunity to address the complex interplay of various inequalities

OH-6-5 Survey of Canadian Medical Schools Addressing
Anti-Black Racism: Black Medical Students' Association of
Canada Short-Term Recommendations

Julianah Oguntala, University of Toronto

Background/Purpose: In 2020, the Black Medical Students' Association of Canada (BMSAC) released recommendations to the 17 Canadian Faculties of Medicine (CFoM) on Admissions, Curriculum and Accountability. The BMSAC recognized the discordance in how Black medical learners are supported and Anti-Black Racism (ABR) is addressed across the country. Therefore, a comprehensive environmental scan was undertaken to discover progress made in response to the 2020 recommendations and identify gaps that exist.

Methods: The survey, developed by the BMSAC and NABL and facilitated by the AFMC EDI-AR Committee, included multiple-choice and short answer questions. It was completed by the CFoM in collaboration with their Black Health and EDI leaders. Categorical responses were converted to alphanumeric grading scores (A-F with corresponding 0-100%), followed by a colorimetric system.

Results: All 17 CFoM completed the survey and the results of the short-term recommendations are presented. Overall, 82% of schools achieved a green rating (80-100%), 6% a yellow rating (50-79%) and 12% a red rating (0-49%). The first recommendation called for a public statement denouncing ABR and its various manifestations in Canada. While most schools made a public statement in 2020, some Faculties addressed racism without specifically addressing ABR. Schools that scored highly committed to prioritizing justice and connected with local and national Black-led medical organizations including the BMSAC.

Discussion: A majority of schools heeded the short-term Calls to Actions in a timely manner, denouncing anti-Black racism and reviewing/implementing institutional policies to address it in medical education. This is however, not a one time process, but an iterative one.

OH-7

Melange

OH-7-1 How Knowledge Shared Using Social Media is Taken up into Health Professions Education Practice: A Qualitative Descriptive Study

Catherine Giroux, McGill University

Background/Purpose: Social media may promote knowledge sharing but what users do with the new knowledge and how it may influence practice remains to be known. This exploratory study aimed to understand how health professions educators (hereafter 'educators') and researchers take up knowledge shared using social media into their educational practices.

Methods: We purposively sampled educators/researchers who used the hashtags #MedEd, #HPE, and #HealthProfessionsEducation on Twitter. We obtained informed consent and conducted interviews via videoconference. We engaged in multiple cycles of deductive and inductive coding and analysis of our qualitative interview transcripts.

Results: Participants identified as educators and researchers (n=12), as researchers (n=1), or as educators (n=1) from Canada (n=8), the United States (n=3), and Switzerland, Ireland, and China (n=1, respectively). Eight participants actively used social media creating/posting original content); six participants indicated passive use (i.e., reading/retweeting content). They discussed the importance of crafting a consumable message and personal 'brand' to streamline the content shared. Social media's accessible, non-hierarchical nature may facilitate knowledge-sharing, whereas the potential spread of misinformation and technological requirements (e.g., internet access, country-specific restrictions on platforms) present barriers to uptake. Participants described using knowledge gained from social media as teaching tools, new research methodologies, new theoretical frameworks, and low-risk clinical interventions.

Discussion: Previous research has demonstrated how social media has empirically been used for diffusion or dissemination rather than as an active process of evidence uptake. The results of this study further our understanding of how the knowledge shared using social media is used in HPE practice.

OH-7-2 Enhancing Access to Genomic Health Care Through an Innovative Genomics Educational Framework

Erin Debruin, University of British Columbia

Background/Purpose: Genomics has the potential to improve health outcomes when patients and their respective health care providers can appropriately and effectively leverage this technology. The ultimate goal of this multi-step project is to catalyze the appropriate uptake of and access to clinical genomic services across BC.

Methods: We followed a program logic model as an exemplar of best practice in genomics education and evaluation. Starting with situation and opportunity analysis, we reviewed existing needs assessments and resources to inform semi-structured interviews conducted across a broad range of stakeholders including researchers, industry representatives, provincial health authorities, genomics education specialists and genomics service providers. Using a deductive content analysis approach, we synthesized recurrent themes and opportunities. This informed the development of key tactics for engaging our partners in genomic education strategies tailored to the BC healthcare ecosystem.

Results: We conceptualized a genomics educational framework, proposing 3 key tactics to engage our partners in genomics education and healthcare. Tactic One (Working with Existing Projects) builds a foundation for system level guidelines through the development of relationships, processes and products. We describe in detail our successes, challenges, and emerging outcomes with leveraging Pathways BC, a tool supporting primary care and genomics service providers with access to referral processes, care pathways and point of care tools.

Discussion: Healthcare professional educational interventions tailored to the local context are successful when designed through a collaborative approach, building on and leveraging both relationships and existing projects and tools.

OH-7-3 Adaptation, translation, and validation of a patient-reported experience measure for children and young people for the Canadian context

Zanib Nafees, McGill University

Background/Purpose: Patient-reported experience measures (PREMs) evaluate children's and young people's (CYP) perceptions of care. An important PREM developed with and for children was created in London, UK. Given the absence of similar North American instruments, we aimed to adapt, translate, and linguistically validate this instrument for use in a Canadian pediatric outpatient setting.

Methods: A qualitative design was used, involving CYP and their parents/caregivers. Phase 1 entailed the English survey adaptation using think-aloud testing, revision, and cognitive testing. Phase 2 involved translation into French, revision and back-translation, and cognitive testing. Phase 3 encompassed a cross-validation of the English and French versions of the adapted instrument.

Results: Fifty-five children in 3 age groups (8-11y, 12-13y, 14-16y) participated in creating the Canadian PREM. In Phases 1 and 2, 41 children participated in reviewing and updating specific questions in the instrument, resulting in adjustments and revisions based on their feedback. In Phase 3, 14 bilingual children linguistically validated the PREM instrument.

OH-7-4 Rural and Remote Barriers to Dermatologist-Based Care in Atlantic Canada: Understanding the Challenges, Identifying the Solutions

Simal Qureshi, Memorial University

Background/Purpose: Access to dermatological care in rural settings has been seldom explored, particularly within the context of Atlantic Canada. Statistics Canada demonstrates that Atlantic provinces, such as Newfoundland and Labrador, have the highest proportion of residents living rurally. This, combined with the limited specialist care offered in these provinces, poses a significant burden for rural individuals seeking appropriate care for their health concerns. Dermatologists in Newfoundland and Labrador are particularly difficult to access for residents living outside of the East Coast of the island, as well as those living in Labrador.

Methods: The goal of this study is to identify access to dermatologist-based care according to the geographic distribution of Newfoundland and Labrador's population. This was done through Google Maps to measure distances between towns/cities and tertiary care centres operating dermatological-based care in St. John's. In addition, Statistics Canada data regarding geographic populations, Index of Remoteness, and cost of travel was utilized.

Results: When factoring aspects such as patients' social determinants of health and limitations with teledermatology, it is clear that patients in rural areas lack access to dermatological care and must endure costly expenditures related to travel and accommodations to fuel their healthcare journey.

Discussion: In understanding the barriers faced in rural access to dermatologist-based care in Newfoundland and Labrador, areas for improvement can be identified with solutions that can be effectively implemented to strategize dermatological care.

OH-7-5 SARS-CoV-2 and Transition of Recent Graduates into Practice

Aleka Alexiadis Brown, Dalhousie University

Background/Purpose: Mandatory lockdowns used to suppress transmission of the SARS-CoV-2 virus had a significant impact on education with close to 1.5 billion students globally experiencing disruption in their education (UNESCO). Health professional trainees were doubly impacted given their need for clinical placements in high-risk situations. Although accreditation and educational policies were used to ensure the safe and effective education of trainees, it is unclear what unique supports are currently needed to support this cohort as they transition into practice. Previous outbreaks have shown long-term psychological impacts, including anxiety, anger, distress, and burnout among health care workers (Jeong H. 2016; Maunder, 2006). Studies have looked at the impact of the recent pandemic on mental health, environment and nutrition (Adams-Prassl, 2022; Verma, 2020; Bennett, 2021). Kim (2021) shows how nursing students managed stress and anxiety during the pandemic via specific supports. However few studies have explored the educational disruptions and ensuing supports needed for graduates transitioning into practice post-pandemic.

Methods: To address this gap, we invited recent health professional graduates to share their perspectives on their transition into practice post-pandemic. A mixed methods approach was used to capture participants' perspective of supports needed during this critical phase of their professional life (Creswell, 2007).

Results: Findings indicate that recent graduates' support requirements varied across programs and were influenced by the level of supports received during the pandemic.

Discussion: This evaluation provides educators, policy makers and health authorities with ways to improve recruitment strategies while supporting recent graduates' transition into practice post-pandemic.

Block I

Ol-1

Social Accountability

OI-1-1 'This is our lane': Exploring how physicians and lawyers engage in public advocacy

Chris Watling, Western University

Background/Purpose: While health advocacy is an established physician role, most of the educational attention to advocacy has been at the individual patient level. Public advocacy – efforts to effect change at the level of communities, populations, or society - remains a poorly defined concept whose educational foundation is underdeveloped.

Methods: Using constructivist grounded theory, we interviewed 12 physicians and 7 lawyers who engage in public advocacy. We used constant comparison throughout an iterative process of data collection and analysis to develop an understanding of what it means to be a professional in the public domain.

Results: Participants conceptualized public advocacy in a range of ways: as problem-solving, as speaking out, as community organizing, as empowering others, or as driving system change. Lawyers perceived public advocacy as an embedded element of their professional identity, while physicians more often viewed it as outside their core professional scope. Nonetheless, professional identity influenced how both groups conducted their work. Physicians were more likely to draw on professional attitudes (eg. their orientation toward evidence, their trusted social position), while lawyers were more likely to draw on professional skills (eg. building an argument, litigating test cases).

Discussion: While medicine has enshrined advocacy in its competency frameworks, it is law whose practitioners more fully embrace advocacy as intrinsic to professional identity, suggesting that roles are difficult to engineer or impose. Collaboration across public-facing professions like medicine and law creates opportunities to reimagine public advocacy, to identify the skills required to do it well, and to refresh educational strategies.

Ol-1-2 <u>Transforming Obesity Education: The Canadian</u> Obesity Education Competencies (COECs)

Joseph Abraham, University of Alberta

Background/Purpose: With ongoing gaps in obesity education delivery in Canada, a transformative shift is needed to address and mitigate weight bias and stigma, and foster evidence-based approaches to obesity assessment and care in the clinical setting. Obesity Canada has created evidence-based obesity competencies for medical education that can guide curriculum development, assessment and evaluation.

Methods: The Obesity Canada Education Action Team has seventeen members in health professions education and research along with students and patient experts. Through an iterative group consensus process using four guiding principles, key and enabling obesity competencies were created using the 2015 CanMEDS competency framework as its foundation. These principles included the representation of all CanMEDS Roles throughout the competencies, minimizing duplication with the original CanMEDS competencies, ensuring obesity focused content was informed by the 2020 Adult Obesity Clinical Practice Guidelines and the 2019 U.S. Obesity Medication Education Collaborative Competencies, and emphasizing patient-focused language throughout.

Results: A total of thirteen key competencies and thirtyseven enabling competencies make up the Canadian Obesity Education Competencies (COECs).

Discussion: The COECs embed evidence-based approaches to obesity care into one of the most widely used competency-based frameworks in the world in CanMEDS. Crucially, these competencies outline how to address and mitigate the damaging effects of weight bias and stigma in educational and clinical settings. Next steps include the creation of milestones and nested Entrustable Professional Activities, a national report card on obesity education for undergraduate medical education, and Free Open Access Medication Education content, including podcasts and infographics, for easier adoption into curriculum.

Ol-1-3 Medical Citizenship and the Social Right to Health Care in Canada: A Genealogy of Medical Education Discourses

Brett Schrewe, University of British Columbia

Background/Purpose: The utility of Canada's universal health care system is contingent upon ensuring that "financial or other barriers" do not impede equitable access to health care. As physicians are key actors in health care delivery, it is paramount to understand how they are formed through medical education to help address these barriers and work for the realization of the social right to health care to which their fellow citizens are entitled.

Methods: This work uses a theoretical framework of Western citizenship, a methodological approach of Foucauldian genealogy, and methods of critical discourse analysis applied to an archive of over 120 policy statements, education frameworks, strategic plans, and guiding documents to explore what kind of physician the competency-based medical education (CBME) system preferentially produces.

Results: Current educational policies and practices produce medical experts primarily focused upon providing high-quality individual clinical care. While this skill set is necessary, it is insufficient to enact CBME's espoused mission to meet societal health care needs and to prepare physicians to work for the equitable distribution of the health care system's intended benefits.

Discussion: In its place, the training system need shift from a focus on medical experts to medical citizens. Centring the latter subject position in medical education broadens how we think about physician competence, and in turn, considers how current educational practices may be re-purposed to develop physicians who inflect the social and political responsibilities of citizenship medically and put the equitable realization of the social right to health care at the heart of their professional efforts.

OI-1-4 <u>Developing Learning Objectives for a Longitudinal</u> Social Justice Medical Curriculum

Sara Jassemi, University of British Columbia

Background/Purpose: Medical education programs increasingly address the social determinants of health. However, these curricula often lack cohesion and integration, leading to a siloed approach towards educating learners about the structural, systemic, and justice issues underpinning these determinants. In order to equip pediatric residents with the capabilities to adequately address health equity, we sought to create an in-depth longitudinal social justice curriculum within our training program.

Methods: We used human-centred design to develop our curriculum, first holding three workshops with key stakeholders in general and subspecialty pediatrics, health equity, and medical education as well as Indigenous practice leads and interdisciplinary partners to develop initial themes through consensus. We refined these themes with resident rotation evaluations (2018-2023), Royal College pediatric competencies, relevant literature, and consultation with other health education programs who had undergone similar curricular renewal. We then used iterative discussion to transform these themes into a cohesive set of learning objectives.

Results: Our five main learning objectives include: (1) recognizing the influence of systems of power, privilege and oppression; (2) identifying personal, professional, and institutional biases; (3) practicing cultural safety within clinical and learning spaces; (4) individual and systemic advocacy; and (5) understanding the links between clinician wellbeing and optimal patient care.

Discussion: Training clinicians to mitigate health inequities is a key task for medical education institutions. Curriculum design strategies that centre social justice, incorporate stakeholders' viewpoints, and account for the difficulties of practicing within an imperfect health care system are paramount to accomplish this necessary goal.

Ol-1-5 Redefining Excellence in Healthcare: Uniting Inclusive Compassion and Shared Humanity within a Transformative Physician Competency Model

Kannin Osei-Tutu, University of Calgary

Background/Purpose: The Canadian Medical Directives for Specialists (CanMEDS) is a physician competency framework of global importance. Presently, a revision project is underway. Multiple expert working groups (EWGs) have convened to contemplate a new path forward. The current framework, despite being celebrated as the gold standard in medical education and practice, may fall short in its ability to adequately address the diverse needs of the Canadian population and possibly those of other countries as well. Can the framework be improved to meet the changing needs of the 21st century physician and the communities we serve? Does is need to be tweak or fundamentally reimagined? With the CanMEDS revision project before us, we now have the extraordinary chance to engage in critical thinking and envision a future practice of medicine deeply rooted in concepts such as social justice, cultural safety, anti-racism, and anti-oppression—a cultural shift that is imperative within the medical profession in Canada. Transformation rather than evolution is daunting and challenging. It demands stakeholders to conceptualize bold visions that resonate with others.

Methods: In this oral session, I present one such vision of a way forward — a transformed CanMEDS physician competency framework calling for a shift in the neutral physician identity towards an action-oriented approach committed to equity and justice for all.

Results: A new conceptual model.

Discussion: I unveil this framework and explain my vision. It is a vision that places inclusive compassion and shared humanity at the heart of transformative healthcare.

OI-2

Assessment

OI-2-1 Entrustable Professional Activities Benchmarks in the Assessment of Medical Students: Learner and Teacher Expectations for Undergraduate Medical Education

Miriam Lacasse, Université Laval

Background/Purpose: Entrustable professional activities (EPA) are a set of specific tasks that a professional is entrusted to perform, encompassing multiple competencies, and that constitute the profession. Observation of EPAs allow faculty to infer competence by assessing the learner's level of supervision required for each task. This study aims to identify the expected level of supervision for the 12 AFMC EPAs at various stages of the undergraduate medical program.

Methods: Using a Delphi approach, experienced teachers (n=40) and learners at various stages of training (n=44) answered a questionnaire using the Chen-adapted generic supervision scale for UME (ten Cate 2020) to identify the expected level of supervision for the 12 AFMC EPAs and their sub-components, at 5 key stages of the program. 15th-85th percentile intervals determined the expected level of supervision, with learners <15th percentile presenting a "developmental delay", and those >85th percentile being "early achievers" for each EPAs. The obtained supervision thresholds were validated in a second round of Delphi.

Results: 40 supervisors and 44 medical students participated in the study. Developmental diagrams for each stages of the program illustrate progress expectations over the program for each EPA. The perceived level of supervision was similar among learners and teachers, except for senior clerkship students, who felt they needed closer supervision than what the teachers would have thought to provide for some EPAs.

Discussion: This study clarifies entrustability level expectations for undergraduate medical learners, which can be used in electronic criterion-based assessment systems to facilitate supervisors' decision-making around learner assessment.

OI-2-2 Perceptions of Resident-Initiated Field Notes

Christina Cookson, Western University

Background/Purpose: Field notes are used in family medicine training nationally in Canada for the dual purpose of documenting formative feedback and informing summative assessments. Most field notes at Western University are being completed by residents, but evidence suggests that physician self-assessments tend to be inaccurate. There is little literature regarding the actual implementation and use of field notes. This study aims to explore family medicine residents' and preceptors' perceptions of the utility and credibility of resident-initiated field notes and to explore how they are currently being used.

Methods: Using constructivist grounded theory, 18 semistructured interviews were conducted with faculty and residents from Western University's family medicine program between 2021-2023. Recurring themes were identified using an iterative, constant comparative process.

Results: Field notes as they are currently being used in the family medicine program at Western University are felt to be of limited utility by residents and faculty. The challenges identified converge around three key areas: ownership, intended purpose, and perceived burden. Within each area, a tension exists between resident and faulty perspectives. Taken together, these challenges appear to threaten the integrity of the field note approach, with both groups expressing a strong sense that the value of field notes in their current form is limited at best.

Discussion: Field notes represent a large investment in time and resources. This research suggests that they are failing to achieve their full value in the learning process. Ongoing efforts aimed at faculty development, resident orientation, and engagement of both groups may help them realize their full potential.

OI-2-3 <u>Using FieldNotes to explore differences in feedback</u> behaviors between continuous and episodic preceptors

Ann Lee, University of Alberta

Background/Purpose: Many residency programs utilize both continuous (long-term) and episodic (short-term) preceptors to teach and assess residents. In our program, both continuous and episodic preceptors use Fieldnotes for formative assessment in the workplace. FieldNotes include a brief summary of feedback shared with the resident about an observed clinical encounter. Given that the relationships between residents and their continuous preceptors are likely to be different than those with episodic preceptors, it is possible that this is reflected in the type of feedback that is captured on FieldNotes. Determining if this is the case can lead to a better understanding of how assessment behaviour might vary by relationship.

Methods: We conducted a secondary data analysis of deidentified FieldNotes completed between 2015-2018 at two teaching sites (N=4206). We coded the FieldNotes according to Hattie and Timperly's (2007) four levels of feedback: Self, Task, Process, and Self-Regulation. We compared FieldNotes completed by episodic vs continuous preceptors using independent-samples proportions to look for differences in feedback levels.

Results: Our analyses showed feedback was comparable for 3 levels (Task, Process, and Self-Regulation) with higher proportions coded with Self level for FieldNotes completed by episodic preceptors (0.053 vs 0.018), z = 6.02, p < 0.001.

Discussion: Our findings suggest that feedback in FieldNotes is comparable between continuous and episodic preceptors except for feedback at the Self level. This information may be useful in understanding and improving feedback provided to residents in the workplace.

OI-2-4 <u>Does learner education handover bias ratings,</u> entrustment decisions and feedback over time?

Susan Humphrey-Murto, University of Ottawa

Background/Purpose: Learner Education Handover (LEH) is the sharing of information about learners between faculty supervisors. Previous studies demonstrate LEH biased scores after viewing a single encounter, but does LEH influence faculty ratings, entrustment decisions and feedback after observing several encounters of the same learner?

Methods: Internal medicine faculty (n=57) from five medical schools were randomly assigned to one of three study groups. Each group received either positive, negative or no LEH prior to watching five simulated resident-patient encounter videos of the same resident. Participants rated each video using the mini-CEX (5 items /global rating), an entrustment scale and provided written feedback. Feedback was assigned a valence score (-3 to +3).

Results: For most videos, there was no difference in mean mini-CEX, entrustment scores or feedback between the study groups. Differences were found for: video 1, the feedback valence was higher in the positive LEH (0.79) compared to control group (-0.53, p<.001) and for video 4 the control group means for mini-CEX global rating and entrustment scores were unexpectedly lower compared to the negative condition (p <.05)

Discussion: In the post-study questionnaire, most raters reported the LEH had minimal effect on their decisions. Only 29% of raters guessed the true purpose of the study." Contrary to previous studies, there was minimal effect of LEH on scores or feedback by faculty after one encounter. No effect of LEH was seen over the subsequent four encounters of the same resident. These results may help alleviate some of the concerns surrounding LEH practices.

OI-2-5 <u>Feedback in an Entrustment-Based OSCE: Analysis</u> of content and scoring methods

Isabelle Nguyen-Tri, Université Laval

Background/Purpose: The integration of Entrustable Professional Activities (EPAs) within Objective Structured Clinical Examinations (OSCEs) has yielded a valuable avenue for delivering timely and meaningful feedback to residents. However, concerns pertaining to the quality of this feedback have arisen. This study aimed to assess the quality and content alignment of verbal feedback provided by examiners during an entrustment-based OSCE after assessing residents using either entrustability scales or checklists.

Methods: We conducted a progress test OSCE for internal medicine residents, evaluating seven EPAs. The immediate two-minute feedback provided by examiners was recorded and analyzed using the Quality of Assessment for Learning (QuAL) Score. We also analyzed the degree of alignment with EPA learning objectives: competency milestones and task-specific abilities. In a randomized crossover experiment, we compared the impact of two scoring methods, entrustability scales and checklists, on the quality and alignment of feedback.

Results: A total of 21 examiners provided feedback to 67 residents. The feedback demonstrated high quality (mean QuAL score 4.3/5) and significant alignment with the learning objectives of the EPAs. On average, examiners addressed 2.5 milestones and 1.2 task-specific abilities in their feedback. No significant differences were observed between the two scoring methods. Entrustment-based OSCEs provide examiners with a valuable tool to deliver high-quality feedback, addressing a wide range of EPAs in line with learning objectives.

Discussion: Our study found no significant impact of the scoring method, suggesting that the feedback's richness and diversity stem from the thoughtful OSCE design and examiners' abilities.

OI-3

EDI - Underrepresentation

OI-3-1 Mini Medical Schools: Dismantling Barriers and Encouraging the Pursuit of Medical Careers among High School Students from Underrepresented Communities

Shelley Ross, University of Alberta

Background/Purpose: Medical schools have historically lacked diversity, partly due to barriers inherent in application processes. These barriers disproportionately affect and prematurely discourage those from marginalized communities from pursuing a medical career. Mini Medical Schools (MMS) such as the Asclepius Medical Camp for Youth (AMCFY) are one avenue for addressing and dismantling perceived and real barriers, to ultimately increase diversity in medicine. In this study, we conducted a secondary data analysis of survey data to examine barriers perceived by AMCFY participants.

Methods: As part of AMCFY, all participants complete both pre- and post-camp surveys. The data sources for this secondary data analysis were completed anonymous surveys from 2016 and 2019-2023 (N=161). Chi-square test was run to explore the relationship between perceived barriers to attending medical school and self-identified participant background. Statistical significance was defined as p<.05.

Results: There was a significant relationship between participants who self-identify as belonging to low socioeconomic status (SES) and identifying lack of financial resources $\chi^2(1,N=161)=13.38$, p<.01, as well as between individuals who self-identified as belonging to an underrepresented group in medicine and their identification of barriers such as lack of financial resources $\chi^2(1,N=161)=4.90$, p=.03 and inadequate guidance and mentorship $\chi^2(1,N=161)=8.49$, p<.01. None of the other relationships examined were statistically significant.

Discussion: To encourage diversity in medical school applicants, barriers such as financial constraints and inadequate guidance and mentorship must be addressed. MMS are one way to address such barriers at an early stage to encourage medicine as a career path for those from underrepresented populations.

Ol-3-2 <u>How Mini Med Schools Influence Knowledge About</u> the Field of Medicine in Those Who Identify as Underrepresented

Shelley Ross, University of Alberta

Background/Purpose: Recruiting medical students from diverse backgrounds is critical to producing physicians who represent the communities we serve. We examined data from a Canadian Mini Medical School (MMS) to understand how participating in the camp influenced students who self-identified as belonging to underrepresented ethnicities in medicine (Indigenous, Black or Filipino) and their knowledge of the medical field.

Methods: High school students applied and were selected to participate in the week-long MMS at the University of Alberta between 2016-2023. Participants rated their knowledge of the medical field (1-10 scale) on both preand post-camp surveys. We compared responses from students who self-identify as belonging to an underrepresented ethnicity in medicine to those who do not using independent sample t-tests.

Results: There was a significant difference in knowledge of the medical field comparing pre- and post-camp scores in both those who identified as underrepresented (t(88) = 5.31, p <0.001) and those who did not (t(69) = 7.24,p <0.001). Pre-camp, the difference in knowledge about the field of medicine comparing those who identify as underrepresented and those who do not was not significant. Post-camp, there was also no significant difference in self-reported knowledge between the two groups.

Discussion: MMS and similar educational programs represent an effective modality for increasing knowledge about the field of medicine in high school students. There was no significant difference in the amount of knowledge acquired between those who identify as underrepresented and those who do not.

OI-3-3 Insights from Mini Medical Schools: Enhancing Knowledge of the Path to Becoming a Physician for Underrepresented High School Students

Shelley Ross, University of Alberta

Background/Purpose: Mini Medical Schools (MMS) are popular tools to engage and educate underrepresented students about medical careers. However, evidence about the components of a successful MMS is limited. This study seeks to identify the efficacy of one MMS (Asclepius Medical Camp for Youth - AMCFY) for informing participants about the process of becoming a physician.

Methods: University of Alberta student researchers conducted verbal quizzes both before and after the 2023 session of AMCFY. These quizzes assessed participants' understanding of the process of becoming a physician. The pre- and post-camp results were compared using independent Students' t-test.

Results: Significant differences emerged between the 50 pre- and 44 post-camp quizzes for the following topics: knowledge of MCAT requirement (Pre: M=1.4, SD=0.70; Post: M=2.0, SD=0.0; t(49.0) =-6.06, p<.01), bachelor degree requirements (Pre: M=0.62, SD=0.49; Post: M=0.91, SD=.29; t(81.2)=-3.52, p<.01), post-medical school training (Pre: M=0.56, SD=0.50; Post: M=0.95, SD=0.21; t(67.5)=-5.07, p<0.01), identifying medical specialties (Pre: M=0.54, SD=0.50; Post: M=0.81, SD=0.39; t(90.6)=-3.01, p<0.01), and identifying allied health professions (Pre: M=0.32, SD=0.47; Post: M=0.59, SD=0.49; t(92)=-2.71, p<0.01).

Discussion: This study demonstrates the efficacy of AMCFY for educating participants about MCAT and bachelor's degree requirements, post-medical school training, differentiating medical specialties, and allied health professions. These findings suggest that AMCFY is effective at enhancing participants' knowledge of the medical career path. It further emphasizes the need for continued support and expansion of similar MMS to create a diverse and informed cohort of aspiring physicians and allied health professionals.

OI-3-4 <u>Exploring Perceptions Behind the Under-</u> Representation of Filipinos Pursuing a Career in Medicine

Marck Mercado, McMaster University

Background/Purpose: Equity, diversity, and inclusion (EDI) work in medical education has become a focus of medical schools across Canada. Current data shows a stark underrepresentation of Filipinos in Canadian medical schools. Current EDI work fails to specifically address the inequities faced by the Filipino-Canadian population in medical school admissions. This study aims to elucidate factors contributing to the disparity of Filipinos in Canadian medical schools in order to consider recommendations for change.

Methods: A qualitative research approach was employed using grounded theory methodology. Five virtual semistructured focus groups were held to reach data saturation. Each focus group was audio recorded and transcribed. Thematic analysis was performed and the results were used to develop a framework. The findings were then subjected to a member checking process to test for credibility.

Results: Factors influencing Filipino-Canadians pursuit to medicine were grouped into three categories: internal factors (specific to the learner's beliefs of self and knowledge), external factors (reflecting family opinions, financial status, education environment, age of immigration and social capital), and Filipino-specific sociocultural factors (such as nursing as a primary career choice, respect for elders, and humility/feeling of inferiority).

Discussion: Filipino-Canadians, similar to other underrepresented groups, experience barriers pursuing medicine that reflect both internal and external influencers. It is imperative, however, for medical schools to consider the unique sociocultural factors that Filipino-Canadians experience, which may differ from other equity deserving groups. EDI interventions should therefore consider unique sociocultural factors when tailoring specific programs.

OI-3-5 Improving equity, diversity and inclusion of underrepresented patient populations in health professional education: Lessons from an international collaboration to pilot the UBC Health Mentors program in Brazil

Cathy Kline, University of British Columbia

Background/Purpose: People with lived experience of the social determinants of health have important life and healthcare experiences that can help students learn how to better meet the needs of marginalized patient populations. An international collaboration between the University of British Columbia in Canada and Bahiana School of Medicine and Public Health in Brazil is exploring ways to support patients living with a stigmatizing health condition (Human T-lymphotropic virus 1) socioeconomic barriers to participate interprofessional health mentors program and their reflections about sharing their social realities and resilience with students from different disciplines.

Methods: Our qualitative ethnographic study examines how to facilitate learning between mentors and students who come from different socioeconomic and cultural backgrounds. Data collection includes a review of student reflective journals, interviews and focus groups with participants.

Results: Preliminary findings show that a partnership between a grassroots peer support organization and clinical teaching staff at an outpatient clinic can be a gateway for engagement with traditionally hard-to-reach groups. When the university invests time and resources to develop and support the relationship (e.g., explanatory 'integration' meetings, transport, refreshments), marginalized individuals embrace the responsibility of mentorship with careful attention to the learning objectives in order to provide a high-quality learning experience. Students develop a deep-seated commitment to challenge stereotypes, prejudices, and societal limitations.

Discussion: The results from this case study could inform efforts to improve equity, diversity and inclusion of underrepresented groups in medical education and help medical schools be more socially accountable to the populations they serve.

OI-4

Teaching and Learning

OI-4-1 Examining feedback to residents on mock examinations to identify opportunities for faculty development

Shelley Ross, University of Alberta

Background/Purpose: Residency programs often offer exam preparation. In family medicine, research indicates that performing well on a practice simulated office oral (SOO) is a reliable predictor of a resident's score on the SOO component of the national family medicine Certification examination. Given the value of mock exams, we wanted to examine the feedback that preceptors share with residents about mock SOO performance during exam preparation sessions in residency.

Methods: We conducted a secondary data analysis study using archived, deidentified FieldNotes from eight teaching sites between 2015 and 2019 that contained the terms "SOO" and "simulated office oral". Using the Effectiveness of Feedback Captured Tool (EFeCT), we scored the quality of the feedback on each FieldNote based on five distinct elements. Scores range from 0-5, with 3 indicating good-quality feedback and scores between 4-5 indicating high-quality feedback.

Results: The search of the database of deidentified FieldNotes (N=21,290) resulted in 220 FieldNotes that included feedback about performance on mock SOOs. EFeCT scores for the feedback on the extracted FieldNotes were distributed as follows: 0 (22 = 10%), 1 (22 = 10%), 2 (23 = 10%), 3 (62 = 28%), 4 (49 = 22%), and 5 (44 = 20%).

Discussion: Our findings suggest that while the majority of the feedback was medium to high quality, faculty development is needed to help preceptors enhance their feedback skills on SOOs. Tools like EFeCT can be used to improve feedback quality. Given the evidence about the importance of mock, better feedback can lead to improved performance on actual SOO exams.

OI-4-2 <u>Contribution of basic science education to the</u> professional identity development of medical learners

Janet Lindsley, University of Utah School of Medicine

Background/Purpose: Professional identity development (PID) has become an important consideration for medical education curricula and scholarship. Contributions of basic science education to physician PID have not previously been broadly explored. We performed a systematic scoping review to uncover how basic science impacts, both positively and negatively, physician PID.

Methods: We followed a six-stage scoping review process, and searched 12 databases and professional organizations' websites from 1988 to October, 2022 for references relating to the impact of basic science on how doctors think, feel, and act, or choose a medical specialty. The landscapes of practice (LoP) learning theory was chosen as a framework for interpreting the identified literary conversations and studies.

Results: Of the 6674 identified references, 257 met inclusion criteria. Through content analysis ten themes and multiple subthemes were discovered. The themes fit well within the three LoP modes of identification: Engagement (engaging in the work of a physician), Imagination (imagining oneself becoming a 'good' doctor), and Alignment (aligning with the practices and expectations of a medical community or specialty).

Discussion: The LoP learning theory provides a unique and useful perspective for both educators and researchers to consider opportunities for impacting physician PID. We identified many ways that basic science concepts and educators can both catalyze and inhibit the transformation of a medical learner into a 'good doctor'.

OI-4-3 <u>Student and Educator Perspectives on Learner</u> <u>Handover in Undergraduate Medical Education: An</u> <u>Exploratory Study</u>

Abby Kapsack, University of Toronto

Background/Purpose: Learner Handover (LH) is a practice in which student evaluations from one clinical rotation are shared with the director of the subsequent rotations. Current literature primarily focuses on attitudes of educators, with no known literature on student perspectives towards LH. This study explores the perspectives of medical students and educators on LH in undergraduate medical education.

Methods: An anonymous online survey was distributed to medical students and educators at the University of Toronto. Multiple choice and Likert-scale questions assessed perceptions around LH. Open-ended questions explored views around optimizing the LH process. Quantitative data was analyzed using descriptive statistics and qualitative data was summarized using thematic analysis with NVivo.

Results: 177 learners and 40 educators completed the survey. Most participants highlighted early identification of students in difficulty (56% students, 93% educators) and individualized learning support (58% students, 70% educators) as benefits to LH. Both groups identified concerns around introduction of bias (90% students, 93% educators) and stigmatization (81% students, 75% educators). Qualitative data emphasized concerns around bias and stigma, confidentiality, and learner anxiety. Participants identified the importance of ensuring transparency, prioritizing student participation, and building support systems as key elements to optimizing the LH process.

Discussion: With the implementation of competency-based medical education, the debate around LH is especially relevant. This study demonstrates that despite perceived benefits of LH, there are several concerns that must be considered prior to formal implementation of a LH policy. Understanding both learner and educator perspectives is essential in guiding the successful development of LH.

OI-4-4 Aiming for EPAs, not competence: evaluating the impact of Competence-Based Medical Education (CBME) on resident physician learning through the framework of growth mindset.

Carolyn Rotenberg, McGill University

Background/Purpose: CBME aims to foster a growth mindset among residents by encouraging learning towards mastery rather than a fixed point (i.e., examinations; Van Melle, 2021). However, studies suggest CBME emphasizes a focus on achieving EPAs (Upadhyay, 2021), with limited utility of feedback received (Bentley, 2022), and resident dissatisfaction (RCPSC, 2022). We aim to assess the impact of CBME on resident education and suggest strategies to optimize implementation.

Methods: A rapid evaluation approach was used. Data was collected from 24 anesthesiology residents using a mixed-methods explanatory sequential design. Quantitative data was captured using a 16-item online questionnaire and qualitative data was collected through semi-structured interviews with a subset of participants. Questions assessed the impacts of Entrustable Professional Activities (EPAs), an established CBME learning activity.

Results: Eighty-seven percent of residents reported qualities of growth mindset; 12.5% reported that EPAs provide opportunities for feedback and coaching and 8.3% reported EPAs promote the use of life-long feedback. Interview data suggest that CBME currently supports a fixed mindset, as residents view EPAs as required "check boxes" unrelated to their clinical competency. Feedback is described as delayed, generic, and unhelpful with a significant administrative burden. Residents interpret low quality feedback as a reflection of limited "investment" from faculty in their education.

Discussion: Discussion: Residents acknowledged that CBME has potential to promote continued growth but its current implementation supports learning toward a fixed point: EPA completion. Strategies proposed to optimize CBME implementation focus on minimizing assessment burnout and addressing the learning environment to enhance feedback quality and faculty engagement.

OI-4-5 "To Lecture or Not to Lecture, That is The Question!

Modern Medical students' Perceptions Regarding

Lectures and in Person Lectures Attendance in the post

pandemic era at the University of Ottawa"

Safaa El Bialy, University of Ottawa

Background/Purpose: The Covid-19 pandemic forced most educational institutions around the world to move from campus-based to online teaching. Our objective was to define first- and second-year medical students' perceptions regarding lectures and lecture attendance in the post pandemic era.

Methods: Second- and first-year medical students were requested to answer a 14-item survey (consisting of Likert, multiple choice, and short answer questions). The survey was created on google drive forms and statistics were extracted from Google Drive analytics with the free Spanning Stats for google drive.

Results: Respectively, 52 and 59 second- and first-year medical students participated in the survey. The top reasons why second- and first-year medical do not attend lectures in person respectively included: access to the zoom link (56% and 76%) and/or audio/video recordings (27% and 24%). while (39% and 32%) stated that they attend only mandatory lectures and (33% and 27%) stated that they got used to not commuting to Campus during the pandemic. The top reasons why second- and first-year medical students attend lectures in person respectively included: "engaging lecturer" (81% and 85%), "professors' emphasis on important learning objectives" (69% and 83%), and "to socialize with peers" (58% and 64%).

Discussion: Most medical students perceive that attending lectures in person still has value in terms of their learning although medical students also see value in the option of attending the lectures virtually. Engaging lecturers, emphasis on important learning objectives and socializing with peers in class are perceived by medical students to be methods of enhancing in person lecture attendance.

OI-5

Faculty Development - Indigenous Health

OI-5-2 <u>Guidance for Cross-Profession Supervision in</u> Clinical Settings

Judith Peranson, University of Toronto

Background/Purpose: Cross-professional learning is an important enabler in the acquisition of collaborative competencies and is also an accreditation requirement in many health professional training programs. However, our environmental scan suggests that most programs lack specific guidance for educators on safe and effective implementation of cross-profession preceptorship in the clinical setting.

Methods: Over the last 15 years, our interprofessional, academic Family Health Team has developed and revised a guidance document for clinical teachers through an iterative process of consultation with key stakeholders (teachers, learners, institutional leaders, and regulatory bodies) and reflection on implementation experience.

Results: This presentation will highlight key components of the 2023 version of this guidance, including: 1) distinguishing the concepts of 'scope of practice', 'scope of competence' and 'role'; 2) considering graded levels of autonomy based on learner level of training; 3) attending to process for teacher and learner orientation, and 4) providing tips for effective implementation across different health disciplines.

Discussion: Although designed for our primary care context, this guidance can be relevant to educators in a variety of clinical settings and across health care professions, as we work together to train the next generation of collaborative practice ready providers.

OI-5-3 Non-Indigenous Medical Educators Perceptions of Professional Competency for the Integration and Delivery of Indigenous Health Curriculum in Canada

Danielle Soucy, McMaster University

Background/Purpose: If the Canadian medical education system is to increase curriculum on Indigenous health in medical schools as outlined in the Truth and Reconciliation's Commissions (TRC) Call to Action it needs instructors with cultural competency in that domain. As most instructors are non-Indigenous Medical Educators (NIMEs), medical educators urgently need to understand what it means to be culturally competent within Indigenous health and engagement with the TRC Calls to Action. This research centres around understanding what constitutes the competency to teach Indigenous health curriculum in undergraduate medical education by NIMEs.

Methods: Using Critical Race Theory (CRT) for analysis three areas are explored: 1. Understanding competency; 2. The role of Indigenous health in medicine; and 3. Medical learner perspectives. One-to-one interviews with Indigenous learners and medical educators, frontline non-Indigenous medical educators and senior leadership from across Canada's medical schools were conducted.

Results: The analysis provided recommendations for NIME training and a snapshot of NIME professional competencies from both their perspectives and of those receiving their teaching. From this research, an initial framework of ethical standards for the teaching of Indigenous health within various health professions was developed

Discussion: This framework can be a highly useful first step in developing territorial-based standards as developed by the local Indigenous communities in which medical schools are situated. It can also provide support for the regulatory, policy, and academic bodies of medicine in addressing the TRC Call to Action #24.

OI-5-4 <u>Finding Their Voice: Educationalists Working in</u> Medical Schools

Joanne Hamilton, University of Manitoba

Background/Purpose: Educationalists working in medical schools play a crucial role in the supporting and enhancing the educational experience of medical learners, whether through faculty development, curriculum development, and/or educational scholarship. Despite their presence in every Canadian medical school, their work remains relatively invisible, often leading to questions about their value and need. To help address this invisibility, this study explored how educationalists in Canadian medical schools established their pedagogic leadership in curriculum change.

Methods: Using procedures from constructivist grounded theory, semi-structured interviews were conducted with eight educationalists working in four Canadian medical schools. Bourdieu's Theory of Practice was used to frame the results, focusing on concepts of field, habitus, and capital.

Results: Participants all described struggles to find their voice in curriculum change and have legitimacy in their role. To establish their legitimacy, participants described first needing to gain access to the community and demonstrate that they would play by its rules. They then needed to accumulate sufficient social and cultural capital to legitimatize their leadership. Further, once leadership was legitimized, educationalists faced risks for enacting it in practice.

Discussion: This study helps build the body of literature on educationalist practice in medical schools from the perspective of curriculum change. It also helps inform educationalist practice and advances this practice as critical to the achievement of the medical school's mission. Importantly, this research supports the value of and need for educationalists in a disciplinary approach to educational development in medical schools.

OI-5-5 <u>Supervisor experiences of using an R2C2 model of feedback that encourages reflection on power and intersectionality</u>

Shaheen Darani, University of Toronto

Background/Purpose: Feedback is teachable skill that is increasingly important in medical education with transition to Competency Based Medical Education (CBME). The R2C2 model is a theory-informed, evidence-based approach to providing feedback. This study explores supervisors' experiences using an R2C2 model, that encourages reflection on intersectionality. It starts a conversation on whether a structured feedback model that incorporates power and privilege could mitigate bias in feedback and increase faculty comfort in engaging with these concepts.

Methods: An exploratory research design using qualitative methods was used. Psychiatry resident supervisors received faculty development on the R2C2 model, racial and gender bias, and intersectionality, and were encouraged to use this in feedback discussions. Ten supervisors participated in semi-structured interviews. Interviews were audio-recorded, transcribed, and analyzed using a thematic approach.

Results: Qualitative data analysis revealed four key themes: When we are similar, it's business as usual; Power is implicit so we need to think about it; "Just because I'm a woman, don't expect me to be"; and Power is assumed so we don't need to talk about it.

Discussion: Supervisors had mixed views about the value of reflection on intersectionality in feedback. Possible explanations for this finding relate to the influence of individual experiences, assumptions, and biases; varied responses to change; and differing levels of supervisor comfort. Further exploration of the impact of intersectionality and power dynamics on feedback processes is needed. Findings suggest a need for faculty development to establish skills in navigating these complex conversations in the supervisor-trainee relationship.

OI-6

Virtual Care

OI-6-1 The Birth of the "Virtual Clinic"

Robert Paul, University of Toronto

Background/Purpose: COVID-19 triggered a broad disruption of healthcare operations and an adoption of virtual care technologies throughout Canadian healthcare institutions. Three years later, virtual care has become a familiar and important tool for healthcare delivery. Our research studied this shift with the goal of identifying the discourses, or "logics" of virtual care and exploring how virtual care might be changing health care practice, institutions, and professional identity. Understanding these changes and their implications is necessary for health professions education as it works to prepare the medical professional of the future.

Methods: Michel Foucault's concepts of Critical Discourse Analysis and spatiality guided this research. Data was gathered by survey (134 patients & professionals), interview (38 patients, professionals & healthcare leaders) and extensive document review (academic publications & public facing documents). Site of study was two Toronto academic hospitals.

Results: Three discourses were identified. Virtual technologies are: 1. Tools of healthcare service. 2. Tools of management. 3. Tools of transportation into the "Mediverse".

Discussion: The first, and dominant, discourse, produces discussion of "how to use virtual care". The second discourse produces discussion of how virtual care can improve efficiency of healthcare operations. The third discourse functions to transport patients and clinicians into a new clinical space where the conditions and rules are different, a space we are naming the "Mediverse". Differences were observed in cognitive presence, in patient-clinician power relations, and in professional competencies. Understanding these differences is important so that health profession educators can adjust educational offerings now and for future curricular development.

OI-6-2 Teaching Learners to Humanize Virtual Care

Andy Huang, University of British Columbia

Background/Purpose: The COVID-19 pandemic has resulted in rapid, widespread adoption of virtual care, and clinicians will continue with a hybrid care model. The project has two aims: to prepare students for virtual care via products and interdisciplinary implementation and to learn how to engage and partner with patients, caregivers, and learners to develop innovative educational products, including case-based learning and accessible podcasts.

Methods: Using participatory action research approach, the project includes four phases: 1. Community engagement, 2. Focus group and individual interviews, 3. Product development and evaluation, 4. Product launch and curriculum integration. We collaborated with a diverse array of volunteers from local community organizations, sharing their experiences virtually contributing a collection of rich qualitative data undergoing extensive thematic analysis.

Results: We discovered numerous themes about virtual care, with the five most important being: 1. Virtual care is an effective adjunct to in-person care. 2. Best practice guidelines will optimize the quality of virtual care. 3. Effective communication is even more important than inperson care. 4. We can build relationships and trust in virtual care before, during and after the visits. 5. Virtual care needs to be more inclusive.

Discussion: This valuable knowledge and perspectives will shape how best to use virtual care in educational and clinical practice. Ultimately, it will lead to the design of five podcasts, three student assessment scenarios, two casebased interactive scenarios, and two interactive presentations to be implemented into the medical curriculum. These newly built partnerships will promote future medical education projects incorporating diverse perspectives across all disciplines.

OI-6-3 <u>Patient Learning Pathways: an entirely new</u> perspective on learning needs in healthcare

Mathieu Jackson, Centre d'excellence sur le partenariat avec les patients et le public

Background/Purpose: The Covid-19 Pandemic has thrust healthcare into a new age of digital and virtual health, for better and for worse. Quebec, the Center of Excellence on Partnerships with Patients and the Public (CEPPP) has developed the Digital Patient and Public Education Strategy (DPPES) in order to organise these emerging technologies around Patient Learning Pathways. This project was developed in partnership with the Quebec Health Ministry and the Federation of Medical Specialists of Quebec.

Methods: The PLP methodology comprises three main phases. During the first phase, main organisational stakeholders are identified and interviewed, such as patient societies and medical associations. In the second phase, patient partners are recruited and participate in an average of five two-hour co-construction workshops to create the first draft of the PLP. At the end of the process, the main organisational stakeholders comment, modify and review the document, until they all agree on its content (Jackson & al.).

Results: The PLP methodology has been met with a great amount of enthusiasm by telehealth actors in Quebec. PLP's have been developed in oncology, mental health, dermatology, paediatrics, pulmonary disease, amongst other fields. PLPs have been used to develop online platforms and are being used to create a first telehealth evaluation framework based on patient competencies, which might be a world first.

Discussion: We present the PLP methodology, an update on the different projects mobilising this methodology and discuss potential implications for medical education. Jackson, M., Clovin, T., Montiel, C., Bogdanova, E., Côté, C., Descoteaux, A., ... Pomey, M. (2023, September 7). Adopting a Learning Pathway Approach to Patient Partnership in Telehealth: A Proof of Concept. https://doi.org/10.31235/osf.io/be5w2 (awaiting publication in PEC Innovation)

OI-6-4 Quarantining from Professional Identity: How did COVID-19 Impact Professional Identity Formation in Undergraduate Medical Education?

Maham Rehman, McMaster University

Background/Purpose: Professional Identity Formation (PIF) entails the integration of a profession's core values and beliefs with an individual's existing identity and values. In undergraduate medical education (UGME), fostering PIF is a clear objective. However, the COVID-19 pandemic has introduced disruptions to PIF among UGME learners, the consequences of which remain uncertain. Therefore, it is imperative to assess the extent and nature of the pandemic's impact on PIF to enhance its effectiveness within the post-COVID UGME framework.

Methods: Semi structured interviews were conducted with medical students from the graduating class of 2022 (n=7) and class of 2023 (n=13) on their medical education experiences during the pandemic and its impact on their PIF. Transcribed interviews were analyzed according to qualitative thematic analysis guided bγ Transformation in Medical Education (TIME) framework for PIF. The TIME framework is composed of six interpersonal and professional domains related to PIF. These include attitudes, personal characteristics, duties and responsibilities, habits, relationships, perception, and recognition.

Results: The COVID-19 pandemic significantly impacted the UGME experience, causing disruptions such as an abrupt shift to online learning, increased social isolation, and limited in-person opportunities. Medical students felt disconnected from peers, educators, and the clinical setting. In the clerkship stage, students recognized knowledge gaps, producing a "late blooming" effect. There was increased awareness for self-care and burnout prevention.

Discussion: Our study suggests that pandemic disruptors delayed PIF owing largely to slower acquisition of skills/knowledge and impaired socialization within the medical community. This suggests that in person and healthcare experiences are a driving force in PIF among medical learners. Ultimately, PIF is a dynamic and adaptable process that was preserved during the COVID-19 pandemic.

OI-6-5 <u>Programme de mentorat d'échographie à distance</u> : une innovation pour la formation délocalisée en médecine de famille

Gabrielle Trepanier, Université de Sherbrooke

Background/Purpose: L'intégration de l'échographieciblée dans les programmes de résidence de médecine de famille est souvent entravée par le manque de superviseurs formés et de ressources pédagogiques. Un programme de mentorat à distance permettant la supervision des résidents dans des lieux de stage délocalisés, par utilisation d'une sonde échographique portative et d'une plateforme électronique, apparait comme une solution innovante.

Methods: L'évaluation de l'innovation pédagogique a été menée pendant deux années consécutives auprès des résidents (14) et des mentors (12). Les données ont été recueillies à l'aide d'évaluation de programme, de sondages et de rencontres de focus group.

Results: Tous les résidents ont atteint l'objectif de 50 images certifiées par indication clinique et 87% des résidents affirment avoir utilisé l'échographie-ciblé au moins une fois par quart de travail. Les résidents ont tous affirmé l'impact positif de l'apprentissage de l'échographie sur leur pratique clinique future et leur appréciation du programme. Les limitations soulevées lors des discussions ont été les limites de la plate-forme électronique. De leur côté les mentors ont apprécié leur participation au programme et la rétention des mentors a été de 85%.

Discussion: Malgré quelques obstacles, la supervision d'échographie-ciblée à distance représente une avancée prometteuse pour les programmes de formation en permettant l'accès à des mentors délocalisés. Des recherches supplémentaires sont nécessaires pour affiner cette méthode et évaluer son impact à long terme sur la qualité de l'enseignement en échographie.

OI-7

Accreditation

OI-7-1 <u>Accreditation of Professional Education: Learning</u> from Each Other

Danielle Blouin, Queen's University

Background/Purpose: In spite of demonstrated benefits, accreditation is often not embraced by programs because it is labor-intensive and distracts resources from the work of education, for gains that are not concretely appreciable. Accreditation across professional fields shares the common goal of ensuring quality education yet uses different standards and processes. Learning from various organizations about processes used to achieve a common goal will help guide accreditation reforms and optimize resource utilization.

Methods: This study analyzes accreditation processes through publicly available documents across seven professional education fields in Canada: management, computer sciences, engineering, nursing, pharmacy, dentistry, and medicine. Organizations were contacted when needed for clarification. Additional information was obtained from relevant certification/licensure websites. A summative content analysis was performed at the concept level, using an inductive approach. Documents were coded manually to extract the various accreditation processes used.

Results: Accreditation standards (elements) vary in numbers from 5-12 (15-94), with most addressing curricular components. All organizations require: ● Submission of factual data, typically linked to standards/elements; ● Submission of self-assessments (a few pages to >300); ● Visits with tours of facilities (1.5-4.5 days); students are not consistently met. Preparation for accreditation start from 9-24 months before a visit. Cycles range from 5-8 years if successful, with interim accreditation activities. Direct costs vary from CAD 4 200 −38 115 per cycle.

Discussion: Although organizations use similar accreditation processes, significant differences exist in their details, accounting for variable direct and indirect (resources) costs. Organizations would benefit from critically comparing their processes looking at minimizing direct and indirect costs while preserving effectiveness.

OI-7-2 <u>Unfolding a preliminary accreditation process</u> through the Continuous Quality Improvement (CQI) lens for a new medical school in Ontario.

Nadiia Kachynska, Toronto Metropolitan University (former - Ryerson University)

Background/Purpose: In March 2022, the Government of Ontario officially confirmed the establishment of the School of Medicine at Toronto Metropolitan University. This endeavour, aimed at addressing the province's healthcare needs, underscores the critical importance of ensuring the new institution meets the highest standards of medical education and quality. This study examines the role of preliminary accreditation as a continuous quality improvement process in developing this new medical school, demonstrating its application in evaluating institutional readiness, identifying areas for improvement, and ensuring long-term success.

Methods: The study employed a case-study method to assess the effectiveness of preliminary accreditation within the context of establishing a new medical school, using theoretical frameworks from existing literature on quality improvement in healthcare and higher education. A two-step comprehensive review of the preliminary accreditation Data Collection Instrument (DCI) was conducted at the initial submission and prior to the CACMS Committee meeting, where changes/enhancements were submitted.

Results: Preliminary findings highlight the pivotal role of preliminary accreditation in shaping the development and culture of continuous improvement for the new medical school. Key outcomes include enhanced institutional readiness, improved faculty engagement, identifying areas for improvement and innovation, and streamlined program development aligned with accreditation standards.

Discussion: The significance of these findings lies in their potential to inform policy and practice in integrating accreditation as a continuous quality improvement process that can facilitate the development of institutions to meet and exceed national and international standards for medical education.

OI-7-3 <u>Embracing Continuous Quality Improvement for Accreditation: The Story of the University of Alberta's Approach</u>

Joanne Rodger, University of Alberta

Background/Purpose: A continuous quality improvement (CQI) process and approach to the accreditation of Canadian medical schools is being implemented across the country. After the University of Alberta's full accreditation in 2022, the MD Program is beginning to implement a CQI approach to ensure ongoing compliance with accreditation standards and elements. This presentation will highlight some of the CQI strategies and approaches that have been implemented (such as the creation of a Quality Improvement Committee).

Methods: CQI as part of accreditation is defined as "the structured organizational process...to monitor compliance with accreditation standards and organizational goals, in the interval between full accreditation reviews and to act on the results."1 The University of Alberta's approach to CQI will be presented through an examination of program evaluation data.

Results: Preliminary data about the implementation of this CQI approach to accreditation will be presented. Data are still being identified and collected at this time as the application of this approach is currently under development.

Discussion: The University of Alberta's implementation of this CQI approach will be shared as part of this presentation, along with recommendations for further action that may be of interest to other schools implementing a similar approach to accreditation. AFMC Continuous Quality Improvement Working Group. (2023). Moving accreditation towards a CQI approach and process. Unpublished report for the Association of Faculties of Medicine in Canada (AFMC).

OI-7-4 <u>Defining and interpreting educational</u> comparability in distributed medical education

Helen Hsu, University of British Columbia

Background/Purpose: Medical schools with regional medical campuses aim to prepare learners to practice medicine that addresses the health care needs of their regional populations. These 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 a common standard of practice. To help understand that tension, this study is aimed at clarifying how comparability is conceptualized and experienced by different stakeholder groups working in distributed medical education contexts. In addition, we aimed to explore factors that influence the interpretation of comparability.

Methods: We used a constructivist grounded theory approach and interviewed key informants known to have roles in the program that required them to address comparability in educational design and delivery. We included educators, administrators, and faculty leaders to maximize heterogeneity of perspectives.

Results: Our analysis yielded a framework that identifies differences in participants' conceptualization of comparability. Their views varied on a spectrum that included comparability as standardization and comparability as an ongoing interpretive process. Participants' positive and negative experiences grappling with delivery of "comparable" education were related to how they conceptualize comparability.

Discussion: The different perspectives and experiences of comparability described in this study have distinct implications. Our analysis suggests these different views carry distinct implications for the operationalization of comparability in distributed medical education. As a result, the study will enable guidance for leaders and educators to better study and deliver health professions education curricula across distributed settings.

OI-7-5 <u>Promoting excellence in postgraduate medical</u> <u>education accreditation through an international</u> recognition program: Is the world ready?

Geneviève Moineau, World Federation for Medical Education

Background/Purpose: The World Health Organization's (WHO) has called for advancement in quality medical education accreditation. The World Federation for Medical Education (WFME) has established a recognition program for undergraduate medical education accreditation that promotes excellence in the work of accrediting agencies around the world based on internationally supported criteria. Several countries have called for a similar program to be developed for postgraduate medical education accrediting agencies.

Methods: To determine the readiness of the international medical education community, a global survey was conducted to identity the postgraduate medical education accrediting agencies in the world. The survey data will be cross-checked and referenced to ensure accuracy prior to inclusion of any accrediting agency to the database. Once the list is completed, interviews and focus groups will be undertaken with accrediting agencies in all 6 WHO regions to ensure appropriate global representation.

Results: By April 2024 the results and verification of the survey will be complete, and a robust list of postgraduate medical education accrediting agencies will be available for presentation. The interviews and consultations will also be concluded to provide an overview of the readiness of the postgraduate medical education community.

Discussion: Should the world be ready for a recognition program, it will be our collective responsibility to ensure that the program be established in such a way that it is guided by principles such as appreciating the complexity of postgraduate medical education around the world, the importance of country and local-specific contexts and that meeting the recognition criteria not require resources beyond the capacity of mid or low-income countries.

Block J

OJ-1

Equity, Diversity and Inclusion - Indigenous Health

OJ-1-1 Towards Anti-Racist Futures: A Scoping Review Exploring Educational Interventions that Address Systemic Racism in Graduate Medical Education

Baijayanta Mukhopadhyay, McGill University

Background/Purpose: Scholars, activists, and clinicians have scrutinized racially differentiated health outcomes for many years.2020 saw intensified focus on these realities, when the deaths of George Floyd in the United States, Joyce Echaquan in Canada, and the inequities evident in the Covid19 pandemic spawned movements demanding that institutions across society, including healthcare, respond to such disparities. Health professional educators have been called upon to prepare future health workers so that they are equipped to meet society's evolving expectations to address these inequities now understood not to be inevitable, but produced by practices, procedures, policies, and patterns that structure our communities and societies. a preliminary review of the literature revealed the absence of a scoping review that examined the current state of knowledge about educational interventions in postgraduate medical programs which address systemic or structural racism in medicine. The aim of the scoping review is to document the current state of knowledge about interventions which aim to equip medical residents with capabilities to address structures of racism that influence health outcomes.

Methods: In this scoping review, we examine and map the current literature on anti-racist educational interventions, that integrate a systemic or structural view of racism, within postgraduate medical education. The aim was to identify, examine, and summarize the peer-reviewed and grey literature about educational interventions in this area. This review presents the current state of knowledge and advances understanding of the research on postgraduate medical education interventions focused on anti-racism. The scoping review protocol followed the methodological framework outlined by Arksey and O'Malley

Results: The descriptive analysis identified 23 papers, that sought to address antiracism within postgraduate residency programs using faculty-led educational interventions. When collating the data, thematic analysis revealed 3 core themes and 8 subthemes: conceptualization (How the researchers conceptualized racism; Anti-Racist Educational Interventions: What the educators taught to challenge racism; Role of community in curricular development), pedagogical innovations (Knowledge vs skills-based teaching; Silos & Systems: Navigating between one-time workshops and integrative curriculum), and outcome & evaluation (Types of Evaluation: The Predominance of Self-Reported Likert Scales; Social Accountability: Who Should Be Evaluating the Interventions?; Intervention Outcomes and Learning Objective (Mis)Alignment).

Discussion: The review highlights some topics within the education of medical residents that may contribute to ongoing attempts to redress and repair the damage that systems and structures of racism have caused to the health of racialized communities. It also showcases innovations within curricular interventions seeking to disrupt and tackle systemic racism, towards anti-racist futures in medicine.

OJ-1-2 <u>Anti-Muslim Discrimination in Medical Training:</u> The Experiences of Resident Physicians

Zainab Furgan, University of Toronto

Background/Purpose: Anti-Muslim discrimination is on the rise in North America, including Canada, where hate crimes against Muslims tripled from 2012-2015. Over 46% of Canadians hold negative views about Islam. Healthcare settings also witness religious discrimination, with American physician studies reporting rates of 24%-75%. However, a lack of literature exists on this concerning issue in Canadian healthcare. It is imperative that data is gathered about experiences of discrimination within residency training so that medical schools and residency training programs can act appropriately and proactively to ensure the safety of all learners. This study aims to estimate the prevalence of anti-Muslim discrimination experienced by Muslim residents and explore the meaning and impact of anti-Muslim discrimination.

Methods: This study adopts a mixed methods approach, employing quantitative and qualitative methods in a triangulation-convergence design. The quantitative arm involves a descriptive survey to examine the prevalence and nature of perceived discrimination among Muslim resident physicians. The qualitative arm utilizes constructivist grounded theory, involving interviews with 25 participants exploring their experiences of discrimination. Data collection and analysis will be simultaneous. An accompanying educational toolkit will disseminate knowledge and skills to address anti-Muslim discrimination in residency programs.

Results: As this study is currently underway and anticipated to be completed by September 2023, the results section is not yet available. Preliminary findings will be available prior to the conference, providing valuable insights into anti-Muslim discrimination experienced by Muslim residents in Canadian healthcare. The findings will identify areas for interventions and policies to address and mitigate discrimination in residency programs.

OJ-1-3 <u>"I don't think I would've had the same experience if I had been white"</u>; Exploring staff experiences of racism at a Canadian Children's Hospital

Amonpreet Sandhu, University of Calgary

Background/Purpose: It is well established that systematic and structural racism permeate the delivery of healthcare in Canada. Healthcare provider experiences of racism are not as well documented. The purpose of our study was to explore experiences of racism among staff at a Canadian Children's hospital.

Methods: This qualitative study used thematic framework analysis. We recruited racialized healthcare providers from various occupations for semi-structured interviews. Inductive coding of interview transcripts was done independently and in duplicate by five researchers. Discrepancies between researchers were resolved through discussion and consensus. We recruited participants until theoretical data saturation was achieved.

Results: Interviews were completed with n=9 staff representing a range of occupations, ages 19 to 49 from a variety of self-described racial and cultural backgrounds. Racism was described as pervasive throughout the children's hospital and can be classified into (1) structural racism - manifested through unofficial hiring practices, and lack of diversity in leadership, reinforcing white privilege; (2) interpersonal racism - participants experienced a sense of othering, barriers to reporting racism, microaggressions and gaslighting; and (3) internalized racism - participants internalized stereotypes and ideologies. Impacts included feeling threatened, frustrated, decreased motivation, and job exodus.

Discussion: Staff experienced racism at multiple levels, including structural, systemic and interpersonal. There is a need for safe avenues for staff reporting of racism that leads to meaningful action. Leadership training, racial diversification, standardized and transparent methods for recruitment and promotion were identified as needed interventions. Our study was limited by a lack of Indigenous staff voices.

OJ-1-4 Experiences of racism and hyper-ritualization of Black medical students and residents in Quebec

Roberta Soares, Université de Montréal

Background/Purpose: According to international research, Black students experience racism in medical school. Considering recent implementation of pathways to medicine for Black students in some Quebec medical schools, it is essential to better document their experience. This qualitative study documents their experience of racism using Critical Race Theory (CRT) and explores some coping mechanisms developed by them using the theatrical metaphor (Goffman, 1959).

Methods: We conducted in-depth semi-structured interviews with two Black medical students and two residents studying in Quebec (n=4) and analyzed their experience through counter-stories guided by CRT. Using inductive thematic analysis, we identified themes related to their experience of racism during medical training and their coping mechanisms.

Results: Our analysis reveals these experiences occur in academic and clinical settings, during classes and clerkship or internship rotations, in social interactions with peers, faculty and patients, and through the curriculum, in form of microaggressions. The legitimacy of Black students in medicine is also questioned, implicitly or explicitly, by teachers, peers, and patients. The analysis also indicates that these students try to cope with racism using a hyperritualization strategy to better fit in (e.g., clothing, behaviours).

Discussion: Considering that they experience various forms of racism (subtle or explicit) during their medical training, these findings urge us to increase awareness of students, teachers and health care workers in universities and teaching hospitals. Pathways to increase the representation of Black students seem to be part of the solution, but improving the learning environment must be a priority to improve racial justice in medical training in Québec.

OJ-1-5 Addressing anti-Indigenous racism in healthcare: Updates from the NCIME Anti-racism working group.

Danielle Soucy, NCIME

Background/Purpose: The National Consortium for Indigenous Medical Education (NCIME) provides leadership in areas of common priority that reform and update the education of physicians and create education contexts, tools, and resources the lead to culturally safe health care delivery. This presentation will focus on the recommendations and innovations being developed and advanced by the NCIME Anti-racism, policies and processes working group, as put forward in the Core Elements of Anti-racism Final Report, the Implementation Guide, and the Anti-racism Course Module to be published and piloted in 2024.

Methods: The Anti-racism, policies and processes working group has been established to collaboratively develop measures to address the persistent anti-Indigenous racism in Canadian medical contexts. Together, this group of Indigenous clinicians, researchers, specialists, and community members has drafted several documents to attend to the persistent and extensive anti-Indigenous racism in medicine.

Results: As this working group is nearing the completion of these deliverables and is entering the next phase which will involve advancing and putting forth our recommendations, we would like to take the opportunity to share the content we have created.

Discussion: This work is fundamentally important to all levels of the medical field as it aims to apprise those working in Indigenous health-related contexts of the necessary approaches and measures to take when addressing the needs of Indigenous peoples and providing culturally safe and anti-racist approaches in medical education contexts.

 $\Omega I-2$

Physician and Medical Student Health and Well-being OJ-2-1 Factors impacting medical student engagement with wellbeing surveys

Kyle Chankasingh, University of Alberta

Background/Purpose: Medical students have been shown to prefer self-report surveys to describe their wellbeing. However, enlisting student engagement with surveys can be challenging, particularly given the sensitive nature of wellbeing surveys and the lingering stigma surrounding mental health in the culture of medicine. Our study therefore sought to identify factors that impact medical student engagement and honesty with wellbeing surveys.

Methods: Using a constructivist grounded theory approach, we conducted semi-structured interviews with 20 medical students at the University of Alberta MD program. Transcripts were coded independently by two researchers who met with a third to review codes. Concurrent data collection and coding occurred until theoretical saturation was reached.

Results: We found six critical factors that impact response rates and honesty with wellbeing surveys: agency, burden, connection, impact, respect, and safety. Psychological safety of the medical school environment was seen as a core requirement that came above and beyond the other factors. Students noted that their current mood could have variable impacts both on engagement and the emotions experienced when responding to a survey.

Discussion: Our study highlights the importance of psychological safety in medical school and further outlines key factors that should be considered by faculties and researchers when surveying medical students on their wellbeing. Care should be taken to mitigate retraumatization and promote healthy reflection through safe, engaged vulnerability. Trust and positionality of the surveyor is critical - students want to feel like they are being heard and that action will be elicited with their voice.

OJ-2-2 <u>Medical Students' Experiences of a Longitudinal</u> Wellness Curriculum: A Qualitative Investigation

Pascale Gendreau, McGill University

Background/Purpose: There is a growing concern about the mental well-being of medical students considering that they are at a higher risk for depression, anxiety, and burnout than non-medical students. There is a need to provide medical students with tangible tools to foster their personal and professional well-being. The Office of Medical Learner Affairs at McGill implemented a Longitudinal Wellness Curriculum (LWC) to foment medical students' well-being, self-care, and adaptability throughout their undergraduate training.

Methods: The purpose of this qualitative descriptive study was to explore students' views about the LWC. Three focus groups were conducted involving a total of 11 medical students. Thematic framework analysis was employed for data analysis.

Results: Results revealed 12 themes generated within 3 categories related to students' experiences of the curriculum: (a) continuum of engagement, (b) personal and professional outcomes, and (c) recommendations. Most participants found the curriculum valuable and supported its integration into the academic learning environment. Preferred methods of curriculum engagement included experiential and active learning, exposure to diverse wellness approaches, small group sessions, role modeling, and student-driven initiatives. Inconvenient curriculum scheduling and skepticism over institutional support were seen as barriers to engagement. Despite differences in perceived effects of the curriculum, most participants identified contributions to their personal and/or professional development.

Discussion: The perspectives of medical students are essential for the provision of student-friendly, engaging, and effective wellness curriculum initiatives. Recommendations and implications for wellness curriculum development and implementation in medical education will be discussed.

OJ-2-3 <u>How do we Define a Health Promoting Working and Learning Environment?</u>: <u>Perspectives from Canadian Medical Residents.</u>

Diana Le, University of Alberta

Background/Purpose: The University of Alberta signed the Okanagan Charter in April, 2021; however, the key components of a health promoting working and learning environment (HPWLE) in a medical setting have yet to be elucidated. Hence, the objective of this qualitative study is to provide insight into what medical residents consider to be crucial aspects of an HPWLE which will inform the development of a specific and comprehensive action plan.

Methods: Semi-structured interviews were conducted virtually via Zoom with medical residents in various specialties and were guided by thematic analysis. Transcripts were independently coded and reviewed by 3 researchers.

Results: We interviewed 16 residents from various medical and surgical specialties. Our rich conversations provided insight into how residents perceive a health promoting environment. Prominent themes with significant implications for developing and fostering a HPWLE were: health promoting leadership, recognition of residents as learners, and interacting with residents from a humanistic perspective. Leaders in a HPWLE must seek and act on feedback, advocate for learners, and embody a health promoting culture. Residents are both employees and learners and an HPWLE must foster a clinical environment that allows residents to develop their professional identities as physicians. Recognizing and treating residents as multidimensional individuals beyond their roles as physicians was emphasized.

Discussion: Identifying factors that are foundational to a HPWLE will inform how we can achieve the goals outlined by the Okanagan Charter and will also help create a well culture framework that can be adopted by other faculties of medicine in Canada.

OJ-3

Teaching and Learning / Curriculum

OJ-3-1 Reading medical Latin – don't let it get under your dermis

Stephen Russell, McMaster University

Background/Purpose: People often become stressed when confronted with long Latin medical phrases. This is because medical people today are still expected to learn the Latin names for body parts – yet most students no longer know how to read Latin. The universal solution seems to be to make students memorize the Latin names and connect them to the vernacular (or "slang") versions that they normally use. The Latin terms thus become a type of bar-code, with no meanings in and of themselves, because students are unable to decipher them. As instructors of both medical language and Latin, we have developed certain formulaic strategies to simplify the Latin used in medicine (mostly anatomy) in such a way that prevents students from becoming needlessly bogged down by those aspects that make real Latin so challenging (or delightful, if you are a classicist). Using examples, this presentation highlights our formulaic approach.

Methods: Over the past ten years, we have been teaching undergraduate and medical students how to read medical Latin. Although we teach all the details, we offer a more wholistic and formulaic approach, which emphasizes to newcomers how straightforward and systematic medical Latin really is.

Results: After learning this formulaic approach to reading medical Latin, health professions learners can much more easily navigate the world of complex phrases that they meet on an every-day basis.

Discussion: Medical students and other health professions learners need a short formulaic approach to reading Latin medical terms.

OJ-3-2 Czech This Out: A Place for Medical Terminology in Canadian Medical Schools?

Lewis Stiles, University of Saskatchewan

Background/Purpose: (Disclaimer: this paper is not presenting the results of clinical research) The bilingual 3d Faculty of Medicine at Charles University in Prague, which trains medical doctors in both English and Czech, includes a Department of Languages & Medical Terminology with seven faculty members who teach English Medical Terminology, and English language in general, to medical students. As far as we know, there is nothing comparable here in Canada. My colleagues and I, all specialists in Greek and Latin Languages, and housed in Humanities departments, have been responding to student demand undergraduate teaching successful medical terminology courses and programs for decades now at a rapidly increasing number of universities throughout the country. These courses are aimed at pre-med (and medical-adjacent students) before they even begin the serious business of studying anatomy and clinical medicine.

Methods: Not applicable **Results:** Not applicable

Discussion: In this talk we look at some of the things they do in Prague in relation to what we do in Canada, ultimately emphasizing our unique approach. We focus on patterns of word-formation and predictable units of meaning in such a way as to minimize rote memorization, and we concentrate on contemporary medical terminology as used in the real world. This paper aims to open a discussion about how we might be able to bring our expertise and approaches to medical school curricula in Canada.

OJ-3-3 It's all Greek to me: frequently observed problems in the language of clinical medicine – and a suggested solution

Stephen Russell, McMaster University

Background/Purpose: In order to reduce the amount of material that people in the health professions need to memorize, we instead propose a shorter way for people to think their way through problematic medical words and phrases. This presentation discusses some of the most easily confused word-forms used in naming clinical disorders and procedures, with an aim to showing how a systematic approach to learning medical terminology does not need to be stressful or involve much memorization. More pointedly, we aim to show how great the rewards are (with respect to understanding the terms you see every day) for such a small amount of time and mental energy.

Methods: Through years of teaching medical terminology, we have discovered terms that are often misunderstood by our students, made obvious by their repeated mistakes – and we concentrate on those, while proposing formulaic approaches to aid in understanding how clinical terms are constructed.

Results: People who follow our methods testify that they are better equipped to handle the vast and confusing language of clinical medicine than they would be if they had to memorize terms unsystematically.

Discussion: People in the health professions need the tools to navigate their way logically through tricky everyday terms, and they need to attain these tools without adding to the burden of what they need to memorize. We propose a way to do this, based on principles we use in teaching at the undergraduate level.

OJ-3-4 <u>Integrating Human-Centred Design and Technology</u> in Curriculum Mapping

Meera Anand, University of British Columbia

Background/Purpose: Curriculum mapping is a method designed to evaluate the strengths, gaps, and opportunities in course topics, in addition to ensuring that a program achieves its learning outcomes. During accreditation reviews of large distributed medical programs, there may be a need to demonstrate how curriculum and learning outcomes are uniformly achieved across the medical education programs.

Methods: The University of British Columbia (UBC) has the largest distributed Family Medicine Residency Program in Canada. In preparation for accreditation, we underwent a quality improvement process that led to adopting a human-centred design approach. This prompted the design of a tech-enabled curriculum mapping app that provides the program with a more intuitive experience in data input, synthesis and reporting.

Results: All 19 UBC sites completed their curriculum mapping within 7 months of App deployment. A post-evaluation of our new method and tool indicated that the human-centred design approach and mapping app were efficient and effective in task completion. Administrators stated that the app provides easily interpretable reports to share with other stakeholders and accreditation bodies. Furthermore, the synthesis of data from 19 sites identified curriculum gaps and helped direct resources to address them.

Discussion: Implementing a human-centred design approach and tool provided us with a more standardized curriculum mapping process that includes easily interpreted data for stakeholders and accreditation bodies to evaluate. Distributed programs may want to consider evaluating their own mapping process to understand where improvements can be made in their curriculum evaluation.

OJ-3-5 The intended and unintended consequences of competency-based medical education among pediatric residents: A survey-based study

Anita Acai, McMaster University

Background/Purpose: Reports from Canadian academic institutions following competency-based medical education (CBME) implementation have suggested important unintended consequences of CBME, such as an increased administrative burden. Since pediatric residency programs transitioned to CBME in July 2021, McMaster University's Pediatrics Residency Program has residents in both CBME and non-CBME streams. Our objective was to compare the resident experiences in these two streams within the areas of observation, feedback, assessment, and burnout.

Methods: We studied resident physicians within the McMaster Pediatrics Residency Program (n=37), in both CBME (n=22) and non-CBME (n=15) streams, by distributing a cross-sectional survey. Questions used Likert-type scales and were designed to explore the resident experience. Furthermore, we used validated single-item measures adapted from the Maslach Burnout Inventory to assess emotional exhaustion and depersonalization. Given reports of increased administrative burden, we included questions to gauge the impact of clinical assessments on burnout.

Results: The response rate was 59.5% (22/37), with full responses from 15 CBME and 7 non-CBME residents. Both groups reported similar rates of observation and feedback occurring in the clinical setting. With respect to burnout, emotional exhaustion and depersonalization were pervasive and endorsed similarly among both groups of residents. However, a Mann-Whitney U test revealed that CBME residents attributed clinical assessments as a cause of their burnout significantly more than the non-CBME group (p=0.023).

Discussion: Given the significantly increased contribution of clinical assessments to burnout in the CBME cohorts, it is important to further investigate the administrative burden of this curriculum and its implications for resident well-being.

OJ-4

Family Medicine

OJ-4-1 A qualitative multiple case study on the development of the Patient's Medical Home practices in Canada

Laurie Yang, McMaster University

Background/Purpose: Access to comprehensive primary care remains a challenge in Canada, with millions lacking a family physician or facing long wait times. The Patient's Medical Home (PMH) model has been advocated as a solution by offering a set of policy recommendations aimed at promoting continuity-based and community-adaptive family medicine care. This study aims to collect data on family medicine practices that have self-initiated adoption of the PMH model, describe the PMH principles they have incorporated, and understand the processes that influenced their development.

Methods: Employing a multiple descriptive case study design, family physician leaders and managers from 14 practice sites in 8 Canadian provinces and territories participated in semi-structured interviews. Discussion prompts highlighted the extent to which PMH characteristics were achieved and the processes that facilitated or challenged practice transformation.

Results: Findings illustrate that all identified practices have established inter-professional teams through various processes. Similarly the adoption of alternative remuneration structures, electronic medical records, and quality improvement initiatives also varies. Self-initiated PMH development can be understood with respect to the varying levels of government involvement. Some relied on personal investment and community fundraising, while most engaged in negotiations with regional health authorities. Facilitators to change include appropriate funding, professional networks, and a passionate team. Barriers to change include a lack of resources and restrictions imposed by stakeholders.

Discussion: The findings will provide examples and evidence-based recommendations that can support other practices in adopting the PMH practice model and improve the delivery of comprehensive, timely, and interdisciplinary primary care for Canadians.

OJ-4-2 <u>Family Physicians' Experiences with Skin of Colour</u> Dermatology: A Needs Assessment

Simal Qureshi, Memorial University

Background/Purpose: This study explored the experiences of family medicine residents with assessing and managing Skin of Colour (SoC) dermatology patients and how current exposure to dermatology training affects physicians' confidence in treating SoC patients. Looking at current dermatological education and its impact on SoC patients, improvements can be made.

Methods: An exploratory study was conducted with questions sent to Family Medicine residents at Memorial assessing their experiences with dermatology and SoC dermatology training. Questions were asked regarding teaching in dermatology including SoC dermatology, and residents' confidence in diagnosing dermatologic conditions in SoC. Residents from all five streams of family medicine residency were included. Streams such as Labrador and Nunavut have considerable exposure to both First Nations and Inuit patients with dermatologic needs; therefore, an assessment of the selfrated comfort and competency of trainees in these locations was especially important.

Results: 10 residents participated with majority falling between the 26-45 age range, having completed their medical degree from MUN. Three residents reported 1-2 hours of didactic lectures/academic half-days dedicated to general dermatology, and 7 residents reported 2-5 hours. However, 90% of participants reported having zero hours dedicated to SoC dermatology.

Discussion: There is a shifting focus from academic resources to increasing opportunities for exposure to SoC through experiential learning. Improvements for SoC derm can also be made to address conditions such as melasma and scarring hair loss. Finally, we can explore increasing the length of dermatological electives and number of didactic lectures focused on SoC dermatology in Family Medicine within a 2-year period.

OJ-4-3 Development of a Health Equity Passport as a Training Tool for Family Medicine Residents on the Social Determinants of Health

Stephanie Zhou, University of Toronto

Background/Purpose: Health equity is achieved when all individuals can attain their full potential for good health. Primary care providers are often the first line of access to care for vulnerable populations, however a lack of resources and provider comfort in managing the social determinants of health (SDOH) leads to inequitable care. Family medicine residency programs are uniquely positioned to train residents on addressing the SDOH in patients' care. However, variations in patient demographics at training sites result in inconsistent experiences working with vulnerable patients. Here, we developed a digital and printed tool for residents to increase their knowledge and comfort in caring for vulnerable patients and address SDOH.

Methods: A focus group of 12 Family Medicine preceptors and 11 residents at the University of Toronto identified the patient populations that trainees had the least experience with. These four populations were: individuals with low socioeconomic status, immigrants, refugees, LGBTQ2S+, Black, and Indigenous patients. A literature search and interviews with healthcare providers identifying with and providing care to these populations were conducted to develop learning objectives for residents based on each patient population, and compile guidelines and resources when managing their care.

Results: A passport was developed with evidence-based learning objectives and resources as a tool for trainees when managing vulnerable populations across different clinical settings. The next phase will test the usability and overall interface of this tool.

Discussion: The Health Equity Passport is the first resource of its kind for family medicine residents and can influence the creation of similar resources across other training sites.

OJ-4-4 <u>Strategies aimed at improving the Family Physician</u> shortage in Alberta

Oluseyi (Seyi) Akinola, University of Calgary

Background/Purpose: The shortage of Family Physicians in Alberta, and Canada as a whole is multifactorial. Across the country, there is a decline in the number of Canadian applicants applying to Family Medicine residency positions. International Medical Graduates (IMGs) continue to show a strong interest in Family Medicine and the data reflects an increase in the number of applicants each year. This study highlights the contribution of IMGs to primary healthcare delivery in Canada. Since 2019, there has been a steady increase in the number of unfilled Family Medicine residency positions across the country after the Match.

Methods: A retrospective analysis using data from the Canadian Residency Matching Service (CaRMS) to analyze the proportion of applicants to Family Medicine in the country between 2019 and 2023.

Results: The results reveal a steady increase in the number of unmatched Family Medicine positions after both iterations. In 2019, 33 positions remained unfilled after the 2nd and in 2023, 100 remained unfilled after the 2nd iteration. Of this number, 22 of these positions were in Alberta with only 3 unmatched positions in Ontario.

Discussion: Amidst the growing crisis of Family Physician shortage in Alberta, the dire Family Medicine match results reiterated the argument for IMGs to participate in the 2nd iteration. A decision was made for a 3rd iteration to take place with IMG applicants invited. This resulted in 20 of the available 22 positions being filled by IMGs and the remaining 2 positions filled by internal transfers.

OJ-4-5 Un curriculum francophone d'échographie au point d'intervention (POCUS) pour résidents francophones en médecine familiale

Dr. Stefan de Laplante, University of Ottawa

Background/Purpose: En médecine familiale, les formations POCUS demeurent limitées, en particulier parmi les résidents francophones. Avec l'appui du modèle de Kern, l'objectif principal de cette recherche était de créer un curriculum POCUS spécifique pour renforcer les compétences, attitudes et connaissances des résidents en médecine familiale francophones.

Methods: Cette étude de faisabilité prospective a été mise en place à l'Hôpital Montfort, Ottawa. Une formation de POCUS a été offerte et le curriculum comprenait du matériel éducatif en ligne et deux demi-journées de séances en personne. Des évaluations avant et après la formation ont été administrées, et les données ont été analysées à l'aide de tests-t appariés.

Results: Sur 20 résidents contactés, 18 ont participé à l'évaluation pré-intervention, soit un taux de réponse de 90%. Post-intervention, 12 résidents ont répondu, soit un taux de réponse de 60%. L'analyse des scores montre une progression significative : le score moyen pré-intervention était de 63,3% (IC 95%: 55,51-71,15) et s'est élevé à 76,7% post-intervention (IC 95%: 66,1-87,3; p<0,05). Cependant, deux évaluations post-formation ont été exclues à cause d'un écart temporel jugé trop important. Quant à l'appréciation du curriculum, elle a été largement positive : 75% des participants (n=9) ont déclaré le trouver totalement acceptable, et les 25% restants (n=3) l'ont jugé acceptable.

Discussion: Ce curriculum POCUS a démontré son efficacité en renforçant considérablement les compétences des résidents francophones en médecine familiale. La forte acceptabilité reçue suggère qu'il pourrait être bénéfiquement intégré dans d'autres programmes de résidences en médecine familiale.

OJ-5

Simulation

OJ-5-1 Copy That! Multidisciplinary Radio Communication
Simulations to Prepare Event Medical Teams

Michael McCue, University of British Columbia

Background/Purpose: At mass gathering events, where communication is challenged by loud music and large geographic space, radios facilitate team communication and collaboration to manage medical issues. Our objective was to develop and implement a radio communication simulation for medical teams to improve communication self-efficacy.

Methods: The curriculum has 2 parts. In Part 1, participants split into trios, and each person is assigned the role of "rover", "dispatch", or "main medical". After the "rover" reviewed a scenario card, the trio communicated for patient care. Trios faced back-to-back, using only speech to communicate, and were instructed to complete 2-4 scenarios with a mini-debrief between scenarios. In Part 2, participants split into duos, being assigned either "rover" or "patient". Duos formed a circle, encasing two people in the middle (central team), functioning as "dispatch" and "main medical". Each duo had 1 scenario, acted out by the "patient", for the "rover" to assess and communicate with the central team. A large group debrief was facilitated after each part. 16 participants and 2 facilitators were involved. Post-session, participants completed a program evaluation survey.

Results: A The average session rating was 4.31/5. Ratings (/5) increased for every self-efficacy statement, including the topics: "closed-loop communication", "audible/understandable messages", "accurate summary of issues", "accurate acuity", "comprehensive, yet concise", "appropriate moments to communicate", and "respectful/professional". All were statistically significant (p<0.01), except for "closed-loop communication" (p=0.068).

Discussion: This program increased participants' self-efficacy for communication competencies, while being positively received. Benefits of strong radio communication in event medicine overlap with areas of communication in other clinical contexts.

OJ-5-2 <u>Scaling Evidence-Based Serious Illness</u> Communication Training in Canada

Warren Lewin, University of Toronto

Background/Purpose: The physician as a 'communicator' is a CanMEDS role that is associated with positive outcomes and offers burnout protection. Yet, communication training is not consistently part of clinical training. At our institution, most graduates could not recall learning serious illness communication skills (SICS) and residents and faculty wanted structured SICS training opportunities. We used local and published data and Kern's six-step curriculum development guide to create a novel SICS teaching intervention, since no Canadian SICS program exists, that merged and adapted skills from the two most evidence-based USA SICS programs.

Methods: Two novel online modules were created to demonstrate core SICS. Participants optionally viewed the modules asynchronously before participating in a VitalTalk workshop. This workshop is a well-regarded, structured, half-day educational experience in which participants practice SICS with simulated patients and receive feedback. Participants completed post-workshop surveys assessing attitudes towards the training.

Results: 33 workshops were delivered locally and provincially (85% virtually) between 03/2020-08/2023 to 382 participants spanning broad specialties including neurosurgery, cardiology, family medicine, and others. 70% were postgraduate medical trainees and 30% were staff physicians, nurse practitioners or social workers. 42% completed post-workshop surveys. 95% agreed they could use the skills in practice, 98% would recommend the workshop to colleagues, and 99% agreed it increased their confidence to lead serious illness conversations.

Discussion: Adapted USA-based SICS training was well-received by Canadian clinicians. Clinicians felt the training provided practical, clinically relevant knowledge to build critical communication competency. Plans are in place for a scalable national SICS program.

OJ-5-3 <u>S6 SIM (Say Something See Something Serotonin</u> <u>Syndrome Simulation) to Prepare Medical Teams at</u> <u>Electronic Dance Music Festivals</u>

Anthony Seto, University of Calgary

Background/Purpose: At music festivals, ad-hoc medical teams manage resuscitation cases including serotonin syndrome. However, team members may not always "say something" (i.e., speak up) when they "see something" (i.e., safety issue) requiring intervention. A simulation curriculum was created to apply a "see something, say something" mentality.

Methods: 22 participants split into 4 groups of 5-6. 1 facilitator and 1 actor were assigned per group. Actors functioned as resuscitation team leaders and were instructed demonstrate strong teamwork/communication skills when navigating a serotonin syndrome case, split into 6 phases: i) agitation, ii) primary assessment, iii) rigidity, iv) wide QRS, v) hyperthermia, and vi) refractory rigidity/hyperthermia. Team leaders committed ≤4 scripted errors per phase, vellow/MODERATE, choosing from green/MILD red/SEVERE, and blue/DANGEROUS errors. Participants were blinded to team leaders' secret acting role, until revealed during debrief.

Results: 12/22 (55%) of participants completed the postprogram survey. The average rating was 4.5/5. Reported program strengths included applying "see something say something", debriefing of built-in errors, showcasing of strong teamwork, the multidisciplinary aspect, and that it was fun. Reported barriers to "say something" included perceived hierarchy, knowledge limitations, and working with an unfamiliar team. Reported solutions included verbalizing thoughts, promoting questions/discussion, increasing one's knowledge, clarifying roles/responsibilities upfront, and normalizing "see something say something".

Discussion: The serotonin syndrome simulation with scripted errors was well-received. Post-simulation debriefs enabled participants to reflect on barriers to "see something say something" and strategies to strengthen team dynamics. Error-scripted simulations can be applied to other contexts to simultaneously work through clinical presentations and practice constructive intervention.

OJ-5-4 The use of simulation in medical education: Where are we now and where do opportunities lie?

Heather Braund, Queen's University

Background/Purpose: While simulation plays an integral role in medical education, it remains underutilized in certain disciplines. This study explored simulation educators' experiences and their recommendations for future simulation programming.

Methods: Healthcare professionals involved in simulation education at Queen's University were invited to participate in an interview or focus group between December 2020 and March 2021. Participants discussed their experiences with integrating simulation and recommendations for future simulation sessions. Data were analyzed thematically in NVivo.

Results: A total of 16 simulation educators participated across anesthesiology, critical care, family and emergency medicine, pediatrics, general surgery, neurosurgery, orthopedic surgery, and ophthalmology. The following themes were identified: evolution of simulation, facilitators, barriers, advice to educators, recommendations. Evolution of simulation comprised of curricular innovation, including use of simulation in interprofessional education and competency-based education, culture, and realism. Barriers were logistical, cultural, and practical. Key practical barriers were issues with realism, fostering psychological safety, and integrating assessment in the simulation environment. Advice to future educators included prioritizing psychological safety, leveraging resources, collaborating. National recommendations for simulation included improving funding, pragmatism and equity in simulation, improving knowledge translation and curricular integration. Suggestions for improving pragmatism and equity were to enhance in-situ simulation and promote diversity in scenarios and models. Curricular integration involved the development of standardized assessment tools and a national simulation curriculum.

Discussion: Findings highlight opportunities to improve the uptake of simulation in health professions education (HPE). Standardized assessment tools and national frameworks for simulation may assist the integration of simulation into HPE.

OJ-5-5 <u>Applications of the metaverse in medical education</u> of acute, emergency and critical care: a scoping review

Nicholas Dunn, McMaster University

Background/Purpose: The metaverse is a virtual world that immerses users, allowing them to interact with the digital environment. Due to the metaverse's utility in simulation, it could be advantageous for medical education in high stakes care settings such as emergency, critical, and acute care. Consequently, there has been a growth in research in this domain, which has yet to be characterized alongside past literature. This scoping review aims to provide a comprehensive overview of all research describing metaverse usage in medical education for emergency, critical, and acute care.

Methods: This study follows the revised version of Arksey and O'Malley's scoping review framework (2005), which was clarified further by Levac et al. (2010). Searched databases include MEDLINE, EMBASE, ERIC, Web of Science, and Education Source. Relevant themes and trends were extracted and mapped for reporting.

Results: The search yielded 8175 citations, which ultimately led to data extraction from 101 articles. Applications of the metaverse were implemented in emergency, critical, and acute care settings in both undergraduate and postgraduate medical education. Studies evaluated metaverse programs for the learning and assessment of both technical skills (ex. management of code blue, sepsis, stroke, etc.) and non-technical skills (ex. interprofessional collaboration, communication, critical decision-making). Barriers to metaverse implementation include technical challenges and difficulty evaluating educational effectiveness.

Discussion: Results of this scoping review provide direction for future primary and secondary research that can aid educational programmers and curriculum planners in maximizing the metaverse's potential in emergency, critical, and acute medical education.

OI-6

Inter-professional Education

OJ-6-1 Community Health Workers in Ontario: An Environmental Scan of Employment Needs, Core Skills and Educational Pathways

Munira Abdulwasi, University Health Network

Background/Purpose: Community Health Workers (CHWs) act as a bridge between marginalized communities and healthcare systems. Traditionally, CHWs bring lived experience with the communities they serve, establishing trust to facilitate connections and fill health system gaps. These are strengths within rapidly aging, urbanized populations and roles that have inspired dedicated professional development internationally. In Canada, CHWs could play a key role in alleviating our primary care access crisis. Yet they are effectively a marginalized profession, with minimal recognition and a few opportunities for advancement.

Methods: An environmental scan was conducted to assess the current employment needs, skills requirements and educational landscape for CHWs in Ontario. We completed a peer-review and grey literature search, a content analysis of employment postings and an assessment of Ontario post-secondary institutions for existing CHW pathways.

Results: Five core skills were identified across 22 CHW job posts: system navigation, community outreach & advocacy, program coordination, health education, community health knowledge base focused on mental health and addiction. 86% of jobs were based in Community Health Centres. Finally, a scarcity of dedicated educational pathways was found: out of 138 programs covering key CHW topics, only seven programs integrated multiple core skills requested by employers.

Discussion: Our scan uncovered significant gaps between the skills asked of CHWs and available educational pathways in Ontario. We advocate for expanded CHW education research on professional identity to explore the implications of formalization and to support the co-design of post-secondary training programs aimed to elevate the CHW profession and fill critical system gaps.

OJ-6-2 <u>Artificial Intelligence in Healthcare: A Self-</u> Assessment Driven Approach to the Fundamentals

Eleftherios Soleas, Queen's University

Background/Purpose: Artificial Intelligence promises to be simply game changing for healthcare, however its fundamentals continue to evade many healthcare professionals and enthusiasts because of their mathematical and technological complexity. To fulfill this need, we created a consortium of healthcare professionals, accreditors, educationalists, and academics to build a foundations course that would guide learners from first-steps to advanced case studies in applying artificial intelligence and machine learning to healthcare.

Methods: We created this consortium based on the principles of developmental evaluation and interdisciplinary collaboration drawing upon our expertise in healthcare, educational design, machine learning, ethics, and artificial intelligence itself to create a course prefaced on self-assessment and application to practice. Evaluation was conducted using a pre-post design, prepost-knowledge tests, and learning analytics.

Results: Pre-post evaluation as well as pre-post-knowledge tests, learning analytics, and testimonials of course attendees were blended together in a mixed-method evaluation to reveal significant differences by one-way ANOVAs to show comfort and knowledge improvements, data analytics to investigate adaptive mastery, and deep promise in this effort to democratize AI in healthcare knowledge.

Discussion: All is not going to get any rarer in healthcare. Positioning healthcare professionals for success in using these new types of intelligence requires investment in educational efforts. This would ensure a health professions workforce that is able to ask insightful questions, draw key inferences, and ultimately successfully augment their clinical practice with artificial intelligence. We will also share insights, practices, and strategies for accomplishing this noble goal.

OJ-6-3 A critical interpretive synthesis of interprofessional education interventions (2011 – 2021)

Sanne Kaas-Mason, University of Toronto

Background/Purpose: Interprofessional practice (IPP) can look quite different depending on a number of dynamics. It is not always clear if IPE interventions are designed or described in ways that indicate the kind(s) of IPP that the interventions are oriented towards.

Methods: The authors engaged in a literature review to explore: (1) how IPE interventions relate to different kinds of IPP and (2) the range of IPP implicitly or explicitly assumed by the IPE interventions. The authors searched four databases for publications from 2011-2021, describing IPE interventions at the pre-licensure level, resulting in a dataset of 110 manuscripts. The analysis involved (1) descriptive summaries of the articles, and (2) content analysis of the rationale and description of the intervention.

Results: In the dataset, 93% (102/110) of the articles described IPE interventions that were designed and/or evaluated using the concept of IPE competencies. The most frequently relied upon competency was "teamwork". Most articles were not explicit about the different kinds of IPP activities that these competencies might be oriented towards.

Discussion: This study substantiates earlier claims that IPE literature tends to focus on competencies and orients towards undifferentiated understandings of "teamwork". While there may be a viable assumption that a focus on competencies prepares future graduates for a range of IPP possibilities, this assumption requires empirical investigation. The analysis in this review is particularly important as healthcare providers are engaging in ever more complex, fluid and distributed forms of IPP that may not be captured in an undifferentiated approach to "teamwork".

OJ-6-4 Rewriting collaborative practice: A cascade of potential outcomes of teaching for critically reflective practice

Victoria Boyd, McMaster University

Background/Purpose: Health professionals caring for children with disabilities must collaborate with parents and teachers across the health and school systems. As the primary mode of communication from clinics to schools, clinical letters can enable or hinder collaborative practice. In a previous study, our team demonstrated that teaching for critically reflective practice changed how learners wrote letters, prompting consideration of power dynamics and systemic barriers. In the current study, we explore the collaborative impacts of these letters, asking: how do critically reflective letters impact parents and teachers' reactions and proposed actions?

Methods: We used a critical qualitative approach to address our research question. Nine parents and eight educators (teachers, resource teachers, principals) in Ontario, Canada participated in semi-structured elicitation interviews. Using clinical letters written by health professions learners as an elicitation tool, participants were asked to describe what they would do if they received the letter. A constant comparison approach was used to analyze the interviews.

Results: Teaching for critically reflective practice may spark a cascade of potential outcomes conceptually grouped as humanistic, communication, collaboration, advocacy, and service delivery outcomes. Critically reflective letters rehumanize patients and families, which may support interprofessional dialogue, collaborative partnerships, and shared advocacy, which, in turn, may improve the delivery of school-based healthcare.

Discussion: Our findings demonstrate the role teaching for critically reflective practice may play in addressing longstanding challenges of collaboration at the health-school interface. In mapping this cascade of potential outcomes, this study establishes a link in the chain of impact between health professions education and healthcare practice.

OJ-6-5 A sociological exploration of intraprofessional collaboration between family physicians and specialist physicians and the implications for collaborative learning

Rene Wong, University of Toronto

Background/Purpose: Intraprofessional collaboration (intraPC) between family physicians (FPs) and specialist physicians (SPs) is essential for high-quality care. However, it has yet to receive much attention in the literature. More nuanced understandings of current intraPC practices can guide the development of innovative ways to prepare trainees. We explored how macrosocietal factors shape current intraPC models and processes and to what effect on physicians' collaborative behaviours.

Methods: Using diabetes as a case study of intraPC, we analyzed formal documents and interview transcripts with FPs and SPs. Informed by concepts from Foucault and the sociology of the professions, we examined how the referral-consultation process (a model of intraPC) emerged within the coordinated efforts to implement evidence-based medicine, the implications for jurisdictional boundaries of FPs and SPs, and the consequences for their collaborative relationships.

Results: The referral-consultation process is operationalized to improve guideline implementation by dividing clinical work between SPs and FPs. This division makes it possible to set boundaries around their respective scopes of practice, fostering a standard of intraPC characterized by SPs enacting a hierarchical role to direct and regulate FPs' practices.

Discussion: Our research revealed that, as currently constructed, models of intraPC may reinforce power dynamics and hierarchical relationships between SPs and FPs. Without being aware of this unintentional effect, attempts to advance learners towards the notions of intraPC fostered by such models may ironically impede the ideals of collaboration. We offer suggestions for how educators could stimulate learner awareness of these power dynamics to open space for other conceptualizations of intraPC.

OJ-7

Humanities in Medicine - Indigenous Health

OJ-7-1 Lessons from the past: historical analysis as pedagogical tool for reflexivity and cultural competency development

Lucy Vorobej, University of Toronto

Background/Purpose: The influence of western imperialism is everywhere and, for the time being, inescapable. How then can medical educators prepare students to develop the competencies needed for respectful engagement? Joining calls for interdisciplinarity in health care training, we argue that analysis of historical case studies offers learners a safe space from which to explore what shapes international educational endeavours.

Methods: This presentation takes a historical case study approach, specifically the experience of Canadian Lucien Matte, who in 1945 was invited by Emperor Haile Selassie to collaborate on the establishment of post-secondary education in Ethiopia. With access to the Canadian Jesuit archives, we used critical historical and discourse analysis to assess the letters written to and from Matte to determine the context and nature of this Canadian-Ethiopian collaboration in education.

Results: Analysis of this relationship reveals that a close relationship of shared learning and exchange was established and catalyzed the successful realization of their educational goals. Also exposed, however, is how Matte championed actions and values that warrant more critical examination; namely, his commitment to externally defined priorities, problematic constructions of authority, and a deficiency model of international development.

Discussion: Analysis of Matte and Emperor Haile Selassie's relationship sheds light both on successful aspects of international collaboration and ongoing effects of colonial assumptions. These understandings contribute valuable knowledge to develop a critical consciousness among learners. With such knowledge, learners can develop skills in critical analysis—including bias identification and ethical responsibilities—and thereby foster capacities for critical reflexivity in present-day practice.

OJ-7-2 The Role of Community Beliefs and Practices on the Spread of Ebola in Uganda, September 2022

Helen Nelly Naiga, Makerere University

Background/Purpose: Community beliefs and practices have previously played major roles in the spread of Ebola virus outbreaks. On September 20, 2022, Uganda declared a Sudan Virus Disease (SVD) outbreak after a case was confirmed in Mubende District. During September—November 2022, the outbreak spread to eight additional districts, affecting community members, religious leaders, healthcare workers, and traditional healers. We investigated the role of community beliefs and practices in the spread of Sudan virus in Uganda in 2022.

Methods: A qualitative study was conducted in Mubende, Kassanda, and Kyegegwa districts in February 2023. We conducted nine focus group discussions (FGDs) and six key informant interviews (KIIs). FGDs included SVD survivors, household members of SVD patients, traditional healers, religious leaders, and community leaders. Key informants included community, political, and religious leaders, traditional healers, and health workers. We asked about health-related beliefs and practices to understand if and how they contributed to the spread of Sudan virus. Interviews were recorded, translated, transcribed, and analyzed thematically.

Results: Frequently reported themes included beliefs that the community deaths, later found to be due to SVD, were the result of witchcraft or poisoning. Key informants reported that SVD patients frequently first consulted traditional healers or spiritual leaders before seeking formal healthcare, who treated SVD-suspected cases without protective measures. Additional themes included religious leaders conducting laying-on-of-hands prayers for SVD patients, SVD patients and their symptomatic contacts hiding in friends' homes, and exhumation of SVD patients to enable traditional burials.

Discussion: We identified multiple traditional and cultural practices that contributed to the spread of Sudan virus in Uganda during 2022. These included engaging traditional healers for treatment, communalism, touching ill persons during prayers, attribution of illness to supernatural forces, and conduct during traditional burials. Such practices should be recognized for their potential contribution to spread of infection during ebolavirus outbreaks in Uganda and similar settings. A follow up study to identify the acceptable alternatives to these approaches together with the community could help reduce spread of infection in future outbreaks.

OJ-7-3 Patient stories optimizing IPE

Annie Descoteaux, Université de Montréal

Background/Purpose: In 2020, the Interfaculty Operational Committee (IOC) of the University of Montreal (UdeM), overseeing the interprofessional education (IPE) curriculum shared across 13 healthcare programs, embarked on a curriculum redesign initiative with the primary objective to put patient partnership at the forefront.

Methods: The iterative review process was initiated with a series of brainstorming sessions involving students, patients-as-educators (PAE), and faculty members affiliated with the IOC. Subsequently, an interdisciplinary working group undertook the development of the novel course, CSS1900, drawing upon the extensive notes and insights derived from the aforementioned brainstorming sessions.

Results: The implementation of the newly designed CSS1900 course occurred during the winter semester of 2023, engaging a cohort of 1,500 students. At the outset of the semester, students from each program underwent an introductory session, co-facilitated by a professor and an assigned PAE. Following this first session, students were granted access to a series of three concise online modules on the fundamentals of patient partnership. In preparation for the second session, students had to read and analyse a patient's written narration of a journey with illness and produce a short text. They then shared their comprehension and arising questions with their peers during the second session. For the second session, students were divided into 125 groups during the winter semester of 2023. These groups met over two days. Each group was facilitated by a PAE. In total, 94 PAE were trained and mobilised.

Discussion: We present preliminary feedback from students, PAE and faculty staff regarding the new course and explore potential benefits and limitations of this transformative approach.

OJ-7-4 <u>Trust Me: Producing Film in BC's Most Remote</u> Communities

Background/Purpose: British Columbia is vast: a landscape divided by rivers, mountains and ocean. Rural population is dispersed and underserved by healthcare. Lack of health resources is more pronounced in remote indigenous communities – where the colonialism couples with geographical isolation. Rural care pales in comparison to the care available in BC's dense population centres The Rural Coordination Centre of BC creates programs to promote patient-centered & culturally safe care, & provides virtual care through Real Time Virtual Support (RTVS). RCCbc collaborated with EdTech to produce a film which would provide context for the programs' use of technology, attract physicians to remote practice, & invite more communities to take part.

Methods: Our 4-person team traveled to two remote indigenous communities to produce a 20-minute film. We developed a methodology based on trust-building and active listening to co-create an authentic narrative with indigenous elders, knowledge keepers, and community members. Our process included open-ended interview questions, the development of an oral and perpetual consent form and a de-colonized payment process.

Results: The result is a cinematic, beautiful and influential multiple-award-winning documentary film. The film has been viewed 5000 times and resulted in multiple positive interactions during events and policy discussions. https://www.youtube.com/watch?v=0YYMNtnBkis

Discussion: Authenticity is earned. Storytelling in film, based on trust-building and principles of co-creation, can be a powerful tool to build awareness, empathy and allyship between cultures, patients, health workers and policy makers.

OJ-7-5 The Role of Art-Making as a Mindfulness Tool for Medical Students

Mia Kennedy, University of British Columbia

Background/Purpose: The medical student population experiences high rates of depression and anxiety. It is therefore vital to provide tools for medical students to monitor and support their own wellbeing. Two such tools are meditative mindfulness and art-therapy. This study investigated the effects of incorporating a purposeful mindfulness practice into art-making compared to art-making alone in medical students.

Methods: We recruited two groups of three UBC first year medical students to take part an art-making session followed by a session that first began with a ten-minute mindfulness body scan and discussion on mindfulness before art-making. Focus groups were conducted to collect data which were audio-recorded then transcribed. The sessions and focus groups were one hour each, one week apart. Data was coded and grouped into two main categories:

Results: firstly, the category 'Art-making as a mindfulness tool', contained themes that describe art-making as allowing one to Stay Grounded, Measure and Process Internal Emotions, and Increase Levels of Observance. Secondly, the category 'Dedicated time for art-making' (during the study sessions), describes that having dedicated time for art-making resulted in Less Focus on End-Product, Ability to Accept Mistakes, Increased Productivity, and Ability to Stay Focused. One theme remained un-categorized and existed overarching through all discussions: the current medical school curriculum was unhelpful in promoting mindfulness tools.

Discussion: Our study revealed many benefits to using artmaking as a mindfulness tool, and the value of promoting the variety of mindfulness tools to medical students through more meaningful integration into the curriculum.

Workshops

Block A

WA-2 I'm Not Sure What to Say or Do: A Dialogue on Creating Accountable, Anti-Oppressive Spaces

Jana Lazor, University of Toronto, Justin Lam, University of Toronto, Robert Goldbert, University of Toronto, Susanna Talarico, University of Toronto

Rationale/Background: Now more than ever, it is important that we as medical educators create anti-oppressive and accountable 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 frontline teachers, leaders and faculty developers may not be experts in anti-oppressive education and at times do not know what to say or do. During this workshop we will describe our university's approach to faculty development in an undergraduate medical education setting to support faculty in practically implementing trauma-informed strategies to optimize teaching and learning spaces.

Instructional Methods: • Didactic presentation: Brief overview of the literature and examples of strategies around creating accountable, anti-oppressive spaces, including guiding principles when thinking about language as a key component. • Small group discussion: Scenarios of common situations encountered in classroom and clinical environments that may disrupt the individual or group learning experience (including using inappropriate verbal and non-verbal language) will be provided for small group discussion. • Large group discussion: Challenges and practical strategies to address common scenarios (including how to respond to inappropriate language and supporting students who have experienced mistreatment) will be discussed.

Target Audience: Medical educators, leaders and learners of all levels are welcome and encouraged to attend

Learning Objective(s): By the end of this session participants will be able to: 1. Describe guiding principles when thinking about using inclusive language as a key component to creating anti-oppressive spaces. 2. Discuss common scenarios that can disrupt the teaching and learning environment, using cases as examples, and how to practically manage these situations. 3. Describe what could be incorporated into a faculty development strategy to supporting faculty in practically implementing strategies to create more accountable, anti-oppressive spaces.

WA-3 Bringing Preclinical Case Based Learning to Life

Anna MacLeod, Dalhousie University , **Stephen Miller,** Dalhousie University , **Victoria Luong,** Dalhousie University , **Wendy Stewart,** Dalhousie University

Rationale/Background: Case based learning (CBL) is an established teaching approach in undergraduate medical education. While the benefits of using CBL are well documented, little has been written about the structure and content of the cases, and how certain design choices fail to foster the engagement and deep learning they were intended to produce. Quite often the details featured in a case are medical facts, diagnoses and test results with little attention paid to the complexity and challenges of real-life clinical care. In this workshop, participants will have the opportunity to explore the creation of cases that bring to life the values and realities that are part of healthcare: narrative, meaning, relationships, culture, community, humanity, complexity and ambiguity.

Instructional Methods: A brief interactive presentation will provide participants with examples of current CBL structure, focus and content. Drawing on the authors research experiences with CBL, participants will be provided with a framework for creating more authentic CBL experiences that draws on philosophy, the humanities and sociology. Using think pair share and small group discussion, participants will use this framework to humanize their approach to case writing, either by modifying an example from their own setting or revising a case that is provided. The workshop will close with a facilitated discussion around best practices for bringing CBL cases to life, creating authentic learning experiences that readily translate to clinical work.

Target Audience: Educators involved in preclinical curriculum development and implementation

Learning Objective(s): Following participation, participants will be able to 1. Identify the ways in which cases are prescriptive and lack authenticity 2. Describe ways to create cases that exemplify the complexities of healthcare 3. Apply the framework provided to bring a real-world case-based learning example to life

WA-4 Integrating Artificial Intelligence into Medical Education: A Curriculum for Appraising Al Studies in Clinical Practice

Gemma Postill, University of Toronto

Rationale/Background: Artificial intelligence (AI) is the machine's ability to mimic humans in learning and behaviour with automatic improvement and without explicit programming. There is increasing recognition for the need to better integrate data science, particularly AI, in medical education given the transformation that is occurring in healthcare owing to the rapid proliferation of health data and technology integration into clinical workflows. Medical trainees themselves have increasingly recognized the need for a basic understanding of artificial intelligence and how it can be utilized in the clinical setting. Understanding clinical AI studies will become an essential skill for interpreting medical literature, assessing potential clinical software augmentations, formulating research questions, and purchasing equipment. To address these needs, we designed, implemented, and evaluated a 90-minute session to teach medical residents how to appraise AI studies.

Instructional Methods: : In this session, we will deliver our 90-minute curriculum and also present the findings of our curriculum evaluation. As such, participants will learn how to appraise AI as well as discuss the considerations that need to be made when appraising AI studies to apply them in clinical practice. We will begin the session with an introduction to the key concepts in AI (e.g., types of AI, examples of clinical AI implementation, and ethical considerations). In an interactive-journal club format, we will then introduce attendees to our appraisal framework and have them participate in the appraisal of a recently published medical AI study. We will also review important points on advances in medical AI education. Overall, 2/3rds of the presentation will be interactive.

Target Audience: Physicians, post-graduate medical trainees, and medical programs coordinators. Learning Objectives: 1. Define artificial intelligence, machine learning, and deep learning 2. Apply key considerations of appraising machine learning to medical AI studies 3. Describe potential application of machine learning in the context of clinical practice 4. Organize AI medical education session for post-graduate medical trainees

WA-5 <u>The Formative Assessment Rubric Experience</u> (FARE) to Improve Lifelong Learning

David Ross, University of Alberta, **Mayada Akil, Georgetown University**

Rationale/Background: Education without assessment is untethered and untenable. However, current assessment methodologies are limited. Multiple-choice questions (MCQs) are easy to implement but promote binary (right/wrong) thinking without allowing an exploration of complexity or nuance. Worse yet, MCQs have been shown to propagate gender, racial, and linguistic biases. Openended assessments promote flexible thinking but suffer from a lack of structure and feedback to the learner. A novel, more fair, approach is needed. The Formative Assessment Rubric Experience (FARE) was designed to incorporate the best elements of MCQ and open-ended assessment approaches. First, learners commit to an open-ended answer. However, unlike purely open-ended questions, FARE incorporates a feedback mechanism within the assessment itself. Learners review a standardized rubric, score sample responses using the rubric, receive feedback on their scoring, and then grade their own open-ended response using the same rubric. Finally, they are asked to submit a new response based on what they've learned. FARE allows for greater reflection on self-assessment for complex topics, while still providing structured feedback to the participant.

Instructional Methods: This workshop will begin with a small group reflection and discussion of the strengths and limitations of common approaches to assessment (15'). Participants will then engage in an interactive learning session that illustrates the FARE approach: (individually) review a brief case (a person who presents with chronic pain and opioid use disorder) and respond to an openended prompt (5'); small group discussion of the case (5'); review a brief educational resource that relates to the case (10'); small group discussion of how this resource changes the way they might think about the original case (10'); individually, complete FARE (10'); small group reflection on the experience (10'). We will then reconvene as a full group to share pilot data (5') and then reflect on strengths and limitations of this approach and discuss how to optimize synergy between educational design, learning objectives, and assessment strategies (20').

Block B

WB-1 Do you want to build an education consultation service? Everything you wanted to know but were afraid to ask

Kulamakan (Mahan) Kulasegaram, University of Toronto, **Melissa Nutik,** University of Toronto, **Milena Forte,** University of Toronto, **Risa Freeman,** University of Toronto

Rationale/Background: The Office of Education Scholarship (OES) was established to shift culture, build community, and support capacity building for Department of Family and Community Medicine (DFCM) faculty at the University of Toronto in the area of education scholarship. The OES offers a consultation service for faculty interested in advancing education scholarship. This unique consultation service is intended to help faculty cultivate and clarify the scope of proposed scholarly projects and develop appropriate plans for project execution and dissemination. Our 'Better together' consultation service is offered by a pair of OES consultants: a clinician educator and an education scientist. Faculty can request consultation(s) at any stage of their scholarship journey. Program structure and tools based on the seminal work of Boyer and Glassick and our lessons learned from over 300 consultations over seven years will be shared in an interactive format for attendees to experience a consultation as both a consultee and consultant. Attendees will have an opportunity to reflect on how elements of the consultation service could be relevant to them and implemented in their home institutions and programs.

Instructional Methods: Brief presentation of the OES consultation service structure, logic model, and lessons learned. Think-Pair-Share activity: Participant use of 'Clear Goals document' to develop a scholarship question. Role play: scenarios as the faculty consultee and consultant, debrief and dialogue. Question and Answer.

Target Audience: Department Chairs and Vice-chairs of education or research Education researchers Education program leaders Faculty interested in education scholarship

Learning Objective(s): By the end of the sessions, participations will: (i) Practice utilizing the 'Clear Goals document' to construct an education scholarship question (ii) Understand the experience and challenges of being consultants and consultees using role-play (iii) Identify the critical elements of a consultation service and discussion strategies for implementation in their local context

WB-2 Key Factors Supporting Diversity & Inclusion Initiatives in Medical School Admissions to Address Workforce Shortages in Remote and Rural Locations

Jordan Buxton, Work Psychology Group

Rationale/Background: Issues matching medical workforce supply to healthcare need originates at point of selection into medical school. "Traditional" applicants, typically from educational, social and cultural advantages, tend to seek urban, specialist practice once qualified. In contrast, those from diverse backgrounds are more likely to work in general practice, rural and deprived settings. In 2016, six new medical schools were opened across England, as part of the government's multi-million pound investment to increase medical student numbers by 25% and increase the number of UK-trained doctors. These new schools were asked to address objectives regarding diversity and inclusion and remote and rural regions workforce shortages, through innovative approaches to attraction and selection to recruit a greater diversity of students. A large scale, mixed-methods, longitudinal evaluation was conducted, with initial evidence demonstrating that these new medical schools were successful in increasing diversity and addressing these workforce shortages.

Instructional Methods: Presenters will share an overview of case material, related to evaluation of six new UK medical schools, with new insights that emerged. Throughout the workshop, illustrations of initiatives set-up by these new schools will be shared alongside data, to demonstrate the impact on increasing diversity within student cohorts, and broader considerations regarding workforce shortages in remote and rural settings. This interactive workshop will be discussion-based and collaborative throughout. Exercises will consider the findings from the case materials in delegates own context. There will be opportunities to share learnings and own personal reflections to support delegates in taking away tangible and practical considerations applicable to their own locality.

Target Audience: This workshop is relevant for those interested in admissions into medical school, specifically with an interest in increasing diversity within student cohorts and seeking to address broader workforce shortages in remote and rural locations.

Learning Objective(s): • Generate an understanding of the challenges and considerations associated with workforce shortages across different international contexts and the role of selection within this. • Build knowledge of the existing innovative initiatives through case examples, and how these may be applicable within own locality. • Develop a 'toolkit' of practical considerations to adapt to own local context, to support addressing challenges around workforce shortages, and diversity and inclusion.

WB-3 Exploring integrated practice audit, knowledge translation and quality improvement strategies in the implementation of clinical practice guidelines.

David M Williams, Medical University of Southern Carolina, David Szalay, University of Toronto, Douglas L Wooster, University of Toronto, Elizabeth Wooster, University of Toronto

Rationale/Background: Clinical practice can be supported by clinical practice guidelines (CPG) based on up-to-date knowledge and consensus from published literature and informed research. CPG are usually developed and promulgated by academic societies and practice groups to inform individual practice. Unfortunately, implementation is often delayed or incomplete. Practitioners may not be aware of their own performance compared to the CPG; a practice gap may go unsuspected and not addressed. The minipractice audit model (m-PAM) is a practical approach which can be readily applied to an individual's practice to identify gaps. Educational interventions based on knowledge translation (KT) principles of 'knowledge to knowledge', 'knowledge to practice', 'knowledge to KT' and 'KT to KT effects' can be applied to any gaps identified. A focused m-PAM can subsequently be used to identify and sustain practice change in a quality improvement (QI) environment of 'audit-intervention-re-audit cycle'. The 'm-PAM-KT-QI format' allows for gap identification and analysis, facilitation and documentation of practice change, sustaining practice change, patient safety and best practice initiatives in individual and shared / interdisciplinary settings.

Instructional Methods: This workshop will use large and small group discussions of practical examples with 'popcorn', 'pair and share' and 'discuss and report' tasks in group and breakout formats. Interactive approaches will be taken to all aspects of the workshop. Individuals in the group will be asked to identify specific needs to allow for tailored, focused tasks and discussions. The presenters have experience in supporting workshops and training health care professionals in the use of mini-practice audits (m-PAM), educational interventions and knowledge translation (KT) strategies in a quality improvement (QI) framework. The workshop will be based on CHIR and other Canadian KT protocols to identify the benefits of these approaches.

Target Audience: This workshop will be aimed for individual practitioners who use CPG, audits, KT or QI approaches to clinical practice, as well as, health educators and leaders who are involved in these processes.

Learning Objective(s): Participants will be able to 1. Analyze and evaluate strategies for the preparation of items, 2. Evaluate such items for practical use and 3. Create items to address higher-level domains.

WB-5 <u>Preparing Short Answer and Multiple Choice Items</u> to Assess Higher-Level Domains.

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

Rationale/Background: Assessment of students, trainees or practicing physicians using short answer or multiple choice formats remains a popular and practical approach to high-stakes, in-house or self-assessment programs. The development of such items can be demanding at basic knowledge and recall levels and even more challenging for higher levels, such as assessment, analysis, synthesis and evaluation. These levels can be assayed; however, training is required in the basic definitions and practice of item preparation, knowledge of applying Bloom's or other Taxonomies to item writing and practical application, and item preparation with coaching.

Instructional Methods: This workshop will use large and small group discussions of practical examples with 'popcorn', 'pair and share' and 'discuss and report' tasks in group and breakout formats. Interactive approaches will be taken to all aspects of the workshop. Individuals in the group will be asked to identify specific needs to allow for tailored, focused tasks and discussions. The presenters have experience in supporting workshops and training health care professionals in developing items, as well as, preparing, editing and reviewing items in a number of assessment settings.

Target Audience: This workshop will be aimed for individual practitioners who are asked to create items for high-stakes, self-assessment, in-house or other assessments of students, trainees and practicing physicians at any level, as well as, health educators and leaders who are involved in these processes.

Learning Objective(s): Participants will be able to 1. Analyze and evaluate strategies for the preparation of items, 2. Evaluate such items for practical use and 3. Create items to address higher-level domains.

Block C

WC-1 Operationalization of Truth and Reconciliation in Resident Wellness

Bronwyn Taylor, University of British Columbia, **Dianna Louie**, University of British Columbia, **Jean Wasegijig**, University of British Columbia

Rationale/Background: Internationally, truth and reconciliation has become an essential and integral topic to address in medical education. We at the Resident Wellness Office feel that Indigenous Counselling is a relevant anti-racist, and truth and reconciliation approach to decolonizing mental health supports for Residents, and because there are Indigenous peoples in all lands around the world, this is relevant to all teaching programs internationally. Therefore, in 2022, the University of British Columbia (UBC) Resident Wellness Office (RWO) began to offer Indigenous Elder Counselling Support to UBC residents.

Instructional Methods: This session will present on the definition of Elder support, evidence for Elder support in multiple venues and countries, how we connected with and collaborated with Elder Jean Wasegijig, barriers we faced, and successes. Evidence will be presented from expert commentaries, and a literature review. The session will explore logistics for organization and execution, cultural sensitivity in terms of recruitment, expectations and payment when working with Indigenous Elders. There will be opportunity for learners to discuss culturally sensitive way to evaluate this process within your wellness program. The session will give participants space to brainstorm how this might fit for your program and ways Elder Support can fit into your residency training. Participants will be able to engage in a mini Elder Support group session during this workshop and ask questions regarding Elder Support with the guidance of Elder Jean

Target Audience: Physicians Program Directors Students People interested in wellness in medicine

Learning Objective(s): • Define Elder Support and discuss the evidence for Elder Support • Identify the challenges faced and methods to overcome these challenges when implementing an Elder Support program • Evaluate their Elder Support program in a culturally safe/respectful/sensitive manner

WC-2 Empowering Preceptors: A Toolbox for Equipping Preceptors to Coach Residents with Challenges in Clinical Reasoning

Danielle O'Toole, McMaster University

Rationale/Background: Medical education faces unprecedented challenges due to pandemic-induced shifts in learning, reduced hands-on experiences, and increased assessments, resulting in heightened demand for academic support. Identifying and supporting learners with academic difficulties is challenging, exacerbated by constraints in time, resources and faculty development. However, ensuring competent physician graduates is paramount. In response to this need, we developed a specialized toolbox tailored to clinical reasoning challenges, a primary concern in postgraduate medical education. Grounded in evidencebased principles, this toolbox equips preceptors with userfriendly checklists, resources, and simulated cases for making an educational diagnosis and implementing personalized teaching strategies. It empowers preceptors to proactively address learning gaps during real-time clinical encounters (insitu learning), instead of awaiting formal remediation.

Instructional Methods: This workshop adopts a multifaceted approach, leveraging the potential of our specialized toolbox. Participants engage in succinct didactic presentations to understand its components and development process. Interactive case-based learning, including structured group discussions, reflective exercises, and hands-on simulations using templates and handouts, enables participants to work collaboratively through cases in small groups, honing their practical skills and knowledge, all while applying the resources and strategies provided by the toolbox.

Target Audience: Designed for clinicians serving as supervisors or primary preceptors, this workshop caters to diverse stages of clinical reasoning skill development in medical students, clerks, residents, fellows, and interprofessional healthcare providers. It particularly benefits clinicians serving as tutors or coaches for learners on enhanced education or remediation plans, as it addresses their unique challenges.

Learning Objective(s): 1. Analyze and interpret the diverse factors influencing an educational diagnosis for a learner experiencing academic challenges. 2. Develop skills in formulating an educational diagnosis for a learner with academic difficulties, particularly in clinical reasoning deficits, using a systematic approach 3. Learn to apply effective strategies to adapt and enhance the curriculum for learners facing academic challenges, targeting the underlying causes of their difficulties. 4. Collaborate with peers to evaluate, critique, and refine educational diagnoses and teaching strategies, fostering a culture of continuous improvement among preceptors.

WC-3 <u>Unlocking Learner Potential</u>: <u>Application of Self-Determination theory to optimize learner engagement,</u> motivation, and wellbeing

Greg Malin, University of Saskatchewan, **Oksana Babenko**, University of Alberta

Rationale/Background: Teachers tend to focus on cognitive strategies to support student learning (e.g., retrieval, dual coding). However, a key but often overlooked facilitator in student engagement and learning is motivation. Self-determination theory (SDT) - a prominent motivational theory - can be applied in tangible ways to support learners' basic psychological needs and support intrinsic motivation to learn, which supports learner recall, deeper learning, desire for optimal challenge. Supporting basic psychological needs helps learners to flourish which also leads to improved wellbeing. The purpose of this workshop is to explore the SDT principles, understand how teaching practices support or hinder learner motivation, and meaningfully implement those practices that support optimal learner motivation and avoid approaches that hinder it.

Instructional Methods: This workshop blends large group discussion and small group interactive components. Large group: Participants will be introduced (15 mins) to the basic tenets and three basic psychological needs of SDT. Small groups: Participants will actively engage in 3 facilitated small group discussions (15 mins each) identifying and discussing teaching strategies that support each of the 3 basic needs, and teaching strategies to avoid that hinder these needs. We will conclude with a large group interactive discussion (30 mins) summarizing the rationale for why certain teaching approaches identified in the small groups are more or less supportive of learner motivation based on SDT.

Target Audience: Educational Leaders, Teachers, Residents, Medical Students

Learning Objective(s): Describe the principles of SDT, including the three basic needs of autonomy, competence, and relatedness, and how they affect motivation. Identify teaching practices that support or hinder learner motivation. Implement strategies to intentionally support learner motivation.

WC-4 <u>Using competency-based feedback to coach</u> professional development in early medical students

Cathleen C. Pettepher, Vanderbilt University School of Medicine, **Neil Osheroff,** Vanderbilt University School of Medicine

Rationale/Background: Health professionals require skills and attitudes beyond medical knowledge. However, because of the heavy focus on medical knowledge during pre-clerkship training, programs often struggle to incorporate experiences and assessments that prepare students for all aspects of clinical work. One approach to addressing this important issue is to incorporate competency-based feedback schemes into the preclerkship curriculum. While maintaining the importance of medical knowledge, competency-based feedback strategies provide students with a roadmap that addresses all aspects of their performance and encourages learner development and sustainability. Furthermore, they allow for the development of students with greater inquiry, more holistic thought processes, and enhanced maturity.

Instructional Methods: The workshop will begin with an interactive discussion that will provide an understanding of competency-based feedback. It will explore the advantages and challenges of incorporating competency-based feedback into health professions curricula and the use of written and oral feedback. Attendees will break into small groups and with the assistance of facilitators, will devise approaches for integrating novel activities into their curricula that could be used to observe specific student behaviors and apply competency-based feedback. Participants will share their strategies in a report out session and return to their small groups to develop approaches for delivering oral and written feedback to trainees. The workshop will close with an interactive group discussion about how competency-based feedback can be leveraged to enhance student development and sustainability as well as the successes and challenges of providing feedback to early health professional trainees.

Target Audience: This workshop will benefit curricular leaders, administrators, and faculty who are involved in health professional education and assessment. Although the workshop will focus on pre-clerkship learners, educators who teach in the clinical workplace will also benefit greatly.

Learning Objective(s): The approach described in this workshop enhances curricular integration and encourages learners to shift their focus from course grades to their preparation for the profession. It also fosters habits of self-reflection and life-long learning. After attending the workshop, attendees will be able to: Describe the advantages of competency-based written and oral learner feedback. Apply practical strategies for designing sessions that incorporate competency-based feedback into the pre-clerkship science curriculum at their institutions.

WC-5 <u>Exploring Teamwork, Collaboration and</u> Communication for Distributed Teams

Dean Lising, University of Toronto, **Sylvia Langlois,** University of Toronto

Rationale/Background: Interprofessional education collaborative practice (IPECP) curricula, models, theoretical and competency frameworks have typically been conceptualized and developed on co-located teams, such as those in acute/tertiary care. However, distributed teams in community/primary care are often not co-located leading to variability of collaborative practice across disciplines and settings. Reeves et al., 2018, highlighted the complexity that shapes diverse teams and proposed a typology that reflects this breadth. They recognized four types of collaborative practice, ranging from interprofessional (IP) teamwork/collaboration (interdependency with greater shared accountability, ie often hospital-based) to IP coordination/networks (more independence, less accountability ie often distributed community/primary care teams). There is a gap in understanding regarding competencies and skills needed for distributed teams to function optimally. Reeves, S., Xyrichis, A., & Zwarenstein, M. (2018). Teamwork, collaboration, coordination, and networking: Why we need to distinguish between different types of interprofessional practice. Journal of interprofessional care, 32(1), 1–3.

Instructional Methods: The conversation corners knowledgesharing model is a psychologically safe space supporting engagement, perspective-sharing and challenge the status quo of traditional IPECP, mindful of the varied context of participants. The workshop will be interactive, led by experienced IPECP facilitators who will provide probing questions exploring critical questions for transformation in practice/education. Agenda: 1) "Where were we?" Theory burst of traditional IPECP frameworks, competencies and team typologies (10 mins) 2) "Where are we?" Small group knowledge sharing activity and report-back contrasting models team communication/collaboration from participants varied contexts. (20+15 mins). 3) "What is needed next?" Small group/reportback mobilizing knowledge of collaborative competencies, models in distributed teams related to participant's practice and teaching contexts. (20+15 mins) 4) "Time for telling": Workshop facilitators will summarize workshop learnings and provide an overview of key literature for distributed teams/collaborations.

Target Audience: Health professional and medical educators, practitioners, students, client/patient/families from all settings

Learning Objective(s): -Deconstruct past and present models of teamwork in diverse care settings - Contrast the types of interactions and collaborative care models needed in various settings -Analyze system, team, and individual barriers to timely and cohesive communication -Apply team competencies and communication strategies in the participant's practice and teaching

Block D

WD-1 GROWing: A lightning fast coaching tool to support personal and professional growth

Anne Matlow, University of Toronto, Shirley Lee, CMPA

Rationale/Background: As in sports, coaching in medicine is often focussed on technical skills improvement. Coaching however offers much more: a forward-focussed alliance where the coach supports the coachee's potential in achieving meaningful personal and/or professional growth. Despite significant burnout, moral distress and uncertainty for those in leadership positions and on the front lines, medicine has been slow to adopt coaching as a personal and professional support tool. This can be particularly challenging for physicians, who have traditionally valued autonomy and infallibility. Similar to 'Just-in-time' (JIT) training in medicine to impart specific clinical knowledge and skills for clinical encounters or procedures, JIT-coaching can be used to support personal and professional growth more effectively and positively. The GROW model, one of many used in coaching, is based on identifying a Goal, determining the current Reality, identifying Options for change, and being Willing to commit to a selected option. To foster compassion among healthcare providers and support sustained change we have modified the model to GROWing, which includes the check-in 'i': I am wondering how you are doing; 'n' for: How have you negotiated your selected decision or action? and 'g' for: Are you good for now or are you ready to GROW again?

Instructional Methods: 1. Theory burst • Coaching: Description; utility and applicability in healthcare • The GROWing model: Description; utility in one's relational toolkit 2. Role modelling: Coaching demonstration using GROWing model 3. Case-based skills practice: Participants practice coaching using GROWing model 4. Large Group Debrief How can JIT-coaching help provide effective peer support? How can the GROWing model be integrated as a tool into your personal and/or professional context?

Target Audience: Healthcare educators and providers; physicians in training, practice and leadership roles; coaches

Learning Objective(s): 1. Appreciate the impact of coaching on personal and professional growth. 2. Describe the JIT GROWing model. 3. Acquire the basic skills to apply the JIT GROWing model. 4. Commit to one action to support coaching in their personal and professional context.

WD-2 So you want to run a DEI workshop: A Practical Framework for Teaching through Dialogue to Raise Critical Consciousness

Ashna Asim, University of Toronto, **Justin Lam,** University of Toronto, **Victor Do,** University of Toronto

Rationale/Background: Residency and fellowship training programs have prioritized equity, diversity, and inclusion (EDI) training for learners to increase knowledge and skills to address healthcare inequities in patient care. Being aware that DEI issues exist, however, does not necessarily mean that trainees can apply that knowledge to identify equity issues in clinical practice. Fostering critical consciousness in trainees provides a lens for identifying inequities by raising a reflective awareness of differences in power and privilege and the inequities embedded in social relationships. This approach also strengthens a commitment to social justice, antiracism, and anti-oppression. This workshop aims to empower participants to develop a EDI workshop tailored to their local context that uses dialogue as a pedagogical tool to increase critical consciousness in pediatric trainees. A dialogical pedagogical approach fosters the critical reflection necessary for raising critical consciousness through flattening the hierarchy between students and teachers by recognizing the expertise of all participants in contrast to traditional didactic approaches.

Instructional Methods: The first half hour will be for introductions and a didactic portion about using dialogue as a pedagogical tool to foster critical consciousness. The remainder of the workshop will be interactive. Participants will be guided through a framework of key design and implementation considerations. Participants will incorporate local institutional context into case creation, and reflect on how to identify facilitators while taking minority tax and representation into account. Participants will also learn about facilitation techniques for fostering dialogue amongst workshop attendees while attending to psychological safety and power dynamics in the classroom. The facilitators' experience running an EDI workshop will be a case study to facilitate participant reflections.

Target Audience: Medical educators, leaders and learners of all levels are welcome and encouraged to attend

Learning Objective(s): 1. Outline the role that dialogue can play as a pedagogical tool in raising critical consciousness in trainees 2. Identify key elements to designing and running a dialogical DEI workshop for paediatric trainees including grounding principles, pedagogical method, organization process, case content 3. Apply individual institutional considerations and context to the above framework of key workshop elements to run a similar workshop for trainees at participants' institutions

WD-3 Navigating Ethics Conundrums for Al Augmented Practice: A workshop for those who seek to be prepared

Eleftherios Soleas, Queen's University

Rationale/Background: The rapid rise of Artificial Intelligence (AI) has transformed society, yet the education of healthcare providers in this field lags behind.1,2 Indeed, AI's potential is contingent on having a health professional workforce that understands its fundamentals and its implications. In healthcare, where AI promises accurate diagnoses and personalized treatment, bridging the knowledge gap becomes vital.3 This workshop explores the challenges of AI education2, such as mitigating the emergence of self-proclaimed experts, who have reach but not grasp of AI; and the need for comprehensive training in AI ethics. Providing this training would ensure a health professions workforce that is able to ask insightful questions, draw key inferences, and ultimately successfully augment clinical practice with AI.

Instructional Methods: Our workshop will begin with a stage-setting micro-lecture (15 minutes) on dimensions of ethical considerations for successfully integrating AI into clinical practice and then embark on a series of case studies (60 minutes; across 4-5 case studies) of real and realistic scenarios where AI has been implemented ethically and/or dangerously. Learners will apply their learning and insights at their tables and with the whole group. Whole and small group discussions will be facilitated. We will close with a whole group discussion of implications and the future of AI integration in healthcare and what the potential ethical pitfalls, promise, and emergent reliance on AI, Machine Learning, and Augmented Reality means for our world.

Target Audience: Healthcare professionals, faculty preceptors, policymakers, educationalists, and trainees in the health professions

Learning Objective(s): Learning Objectives: At the end of this session, learners will be able to: 1. Identify ethical dimensions in the application of AI in healthcare 2. Appraise AI applications for potential ethical pitfalls 3. Formulate strategies to ensure AI are integrated ethically 4. Improve their practice using AI augmentation in alignment with sound ethical principles

References:

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- 3. Tolsgaard MG, Pusic M V., Sebok-Syer SS, et al. The fundamentals of Artificial Intelligence in medical education research: AMEE Guide No. 156. Med Teach. 2023;45(6):565-573. doi:10.1080/0142159X.2023.2180340

WD-4 <u>Incorporating health advocacy projects into family</u> medicine clerkship: Ten years of lessons learned

James Owen, University of Toronto, Karen Weyman, University of Toronto, Melissa Nutik, University of Toronto, Sharonie Valin, University of Toronto

Title Incorporating health advocacy projects into family medicine clerkship: Ten years of lessons learned

Rationale/Background: Health advocacy is a core physician competency. Physicians are accountable for addressing structural and systemic inequities, and medical educators have a responsibility to equip future doctors with these skills to do so. Despite recognition of its importance, teaching and assessing health advocacy in medical school remains challenging. Since 2014, the MD Program at the Department of Family and Community Medicine at the University of Toronto has piloted and implemented three iterations of an experiential Health Advocacy Project in the Family Medicine third-year Clerkship. For the project, students identify a patient for whom social factors impact health and develop, implement, and present an advocacy plan. Evaluation data has been collected from students and faculty. This session aims to share principles of success and pitfalls to avoid while implementing a health advocacy curriculum during clerkship. Discussion will include: (i) developing effective objectives for an advocacy project, (ii) rubrics and evaluation schema, (iii) nuances of project implementation across geographical and community differences, (iv) faculty development, (v) coordination in a longitudinal integrated clerkship versus a block rotation, and (vi) project implementation within the framework of a patient panel. Conclusion: Participants will leave the session with practical considerations and strategies for curricular development, implementation, and evaluation of health advocacy projects.

Instructional Methods: Learning Objectives 1. Critique different approaches to experiential advocacy teaching 2. Identify barriers to authentic advocacy project development and implementation at your institution 3. Apply lessons learned in advocacy teaching from other institutions to your own advocacy curriculum Session Teaching Plan 5-15 min: Introduction 16-40 min-interactive overview of 10 years of Advocacy Project Initiatives 41-70 Discussion amongst groups about successes and challenges in advocacy teaching at their institutions 71-90 Wrap-up in large group, questions, next step planning

Target Audience: Educators looking at introducing curriculum that teaches experiential advocacy

Learning Objective(s): 1. Critique different approaches to experiential advocacy teaching 2. Identify barriers to authentic advocacy project development and implementation at your institution 3. Relate lessons learned in advocacy teaching from other institutions to your own advocacy curriculum

WD-5 The 4C's of Influence: A Framework for Teaching Leadership Development across the Medical Education Continuum

Jerry Maniate, University of Ottawa **Kordan Harvey**, University of Ottawa, **Victor Do**, University of Toronto

Rationale/Background: Leadership development is recognized as part of the core skill set of physicians. Competence, Character, Connection & 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. We use a variety of pedagogical methods to implement a comprehensive adaptable curriculum. As leadership requires foundational skills & knowledge, a leader must be competent to exert positive influence. Character Based Leadership stresses development & commitment to values & 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 & diverse networks ensure different perspectives are integrated & valued. Connected leadership involves inspiration, authenticity, collaboration, & engagement. To create a thriving, health promoting learning environment, culture will hold everything together.

Instructional Methods: Framework presented in engaging lecture format (15 mins) Review interactive case study that utilizes our framework to address a challenging scenario (15 mins) Small groups activities that guide attendees through initial steps to integrate concepts into curriculum (60 mins) We will particularly highlight how the model is designed to be highly adaptable and focus on integrating leadership competencies into pre-existing activities in all settings (e.g. half-day, ward rounds, bedside teaching, journal club).

Target Audience: This is an introductory session for program directors, learners, researchers, faculty and other individuals involved in leadership teaching and curriculum development for postgraduate education This session will include brief background information on leadership education in medicine, then focus on our novel framework. Individuals with any level of engagement with leadership medical education would benefit from the session as we challenge participants to evaluate their current leadership education curricula, while guiding participants on how to implement this novel framework in their own unique settings to foster leadership development in a comprehensive, integrated manner.

Learning Objective(s): Describe the 4C's of Influence in Medical Education Framework. Explain the relationship between 4C's, effective influence & leadership. List various approaches to support the implementation of the 4C's of Influence.

Block E

WE-1 <u>Tips and tricks for successfully publishing scholarly</u> work in an international journal on medical education

Julie Hewett, IAMSE, Peter De Jong, IAMSE

Rationale/Background: When publishing scholarly work in a scientific journal, not only the writing skills of the author are important. At least as important is choosing the right strategy in preparing and submitting the work. Before submitting a manuscript it might also be useful to know how the Editorial Office and Editorial Board of a journal handle the manuscripts they receive. First the differences between education (which is a social science) and the biomedical sciences will be explored. These two areas are quite different and many novice scholars in education struggle with this, especially when they have a health science background. Next, the presenters will address 7 important steps to successful publishing. It starts with what the content exactly is, who the intended audience should be, and what journal might be the best fit. An overview of several journals in Medical Education will be presented and their differences will be discussed. Characteristics of several manuscript types available in these journals and the importance of the cover letter will be discussed, and some general advice will be given in order to make the process of submission more successful. The presenters will also provide the attendees more insight in the editorial processes and will showcase what is happening "behind the scenes" of a journal.

Instructional Methods: The workshop contains a combination of short presentations and small group activities. In small group assignments, participants will share experiences and thoughts around topics like barriers in publishing, article formats and writing strategies. With these discussions the several steps in submitting a manuscript will be clarified. Based on the brainstorm exercises and actual experiences from the audience, the presenters will provide tips and recommendations. At the end of the workshop the participants will have a better understanding of scientific publishing and how a manuscript should be submitted.

Target Audience: The workshop is intended for those with no or little experience in submitting manuscripts to international journals in specifically the field of Medical Education, even if they already have experience with publishing in other fields.

Learning Objective(s): • Participants can explain the differences between educational research and biomedical sciences • Participants can identify the most appropriate journal for their specific manuscript • Participants can describe the editorial process of a journal

WE-2 Advancing Women and Enhancing Equity in Medicine and Medical Education

Renate Kahlke, McMaster University, **Sandra Monteiro,** McMaster University, **Teresa Chan,** Toronto Metropolitan University

Rationale/Background: With the rise of Equity, Diversity and Inclusion discourse in medical education, there is increasing awareness that, although women are more likely to occupy seats at our tables, they still tend to make less money, and are less likely to hold prestigious positions. The hope that as more women enter medicine and medical education, they would "trickle up" through the ranks has not come about. Thousands of studies document a persistent gender gap across many important metrics such as publication counts, keynote speeches, and leadership positions. Most efforts to remedy this disparity focus on encouraging women to apply for prestigious positions, or increasing the number of offers women receive to give keynotes (1). This is no doubt important, but, equally so, we need to examine the social and structural barriers that prevent women from saying "yes" when opportunity arises. The aim of this workshop is to discuss findings from a recent critical literature review (2) specifically, that social expectations, culture, and gender stereotypes create barriers that prevent women from saying "yes" to advancement opportunities. Addressing these social and structural barriers is critical if we are to achieve equity for people of all genders in medicine. References 1. Darling N, Greany C, Kegley M, Woods A, Wood K, Miller A. Empowering women in academia via MidCareer Mentoring (WAMM): posttenure promotion. Vol 5. 2021:195. 2. Monteiro S, Chan TM, Kahlke R. His opportunity, her burden: A narrative critical review of why women decline academic opportunities. Medical Education. 2022 Feb 23.

Instructional Methods: 1. In a didactic presentation (<20 min), facilitators will introduce participants to the topic and describe the evidence for a gender gap in academic medicine. The goal is to arm participants with evidence to use in their allyship, and a copy of the relevant publication will be provided. 2. Participants will analyze a series of case studies to identify different barriers to advancing women, and brainstorm ways that allies can facilitate women's full participation in medicine and medical education. 3. After each case study, we will facilitate a large group debrief to share strategies and consolidate learning.

Target Audience: Clinicians, faculty, and leaders engaged with academic medicine

Learning Objective(s): 1. Describe the evidence for the disparity between men and women's advancement in academic medicine 2. Describe the barriers to women's advancement in academic medicine 3. Discuss strategies allies can use to support women's advancement

WE-3 Fight, flight, or embrace? Let's talk about the role of artificial intelligence in health professions education

Lisa Purdy, University of Alberta, **Shelley Ross,** University of Alberta

Rationale/Background: Leaders, learners, teachers, and programs in health professions education (HPE) are increasingly encouraged to integrate artificial intelligence (AI) and machine learning into learning, teaching, and practice. The recent explosive advances in AI and machine learning, especially the emergence of publicly accessible generative large language models (LLM) like OpenAl's ChatGPT and Meta Al's Alpaca, are unprecedented in their potential for both opportunity and ethical challenges to all aspects of HPE. There are undeniable benefits to incorporating AI and LLMs into curriculum and assessment in HPE programs, including: using them to design and implement sophisticated automated grading systems; create simulated patient encounters that allow for progress testing, and; facilitate the development of adaptive expertise through the safe integration of productive failure for learners. However, there are also dangers, including risk of dehumanizing patient interactions, issues around data privacy/security, and potential for bias or error associated with data sources accessed by LLMs or Al. Dangers for learners include the potential for plagiarism inherent in the way that LLMs generate content, and negative impacts on learning associated with taking shortcuts through the use of AI/LLMs rather than actively seeking out and interpreting information. The intent of this workshop is to introduce participants to the opportunities and threats of the use of AI, LLMs, and machine learning in HPE in order to generate ideas around policy and guidelines development.

Instructional Methods: This highly interactive workshop uses both didactic presentation and case examples to explore benefits and risks of Al. We incorporate co-construction of learning, where participant input is equally as important as that of the presenters. Both small and large group discussions will occur. Participants will begin work on guidelines/rules/policies using a facilitator-provided template.

Target Audience: Anyone with an interest in AI – multiple perspectives are welcome.

Learning Objective(s): 1. Describe how AI can be used in health professions education. 2. Identify advantages and risks of incorporating AI into teaching and learning at their home program. 3. Develop a policy/guideline about the use of AI and/or machine learning technologies in their home program or institution.

WE-4 <u>Harnessing the power of generative artificial</u> intelligence (ie. ChatGPT) in medical education

Alishya Burrell, Western University, **Amrit Kirpalani,** Western University, **Erin Peebles,** University of British Columbia

Rationale/Background: This workshop on using generative artificial intelligence (AI) for medical educators aims to address the growing potential of AI and machine learning in medical education. By exploring generative AI, medical educators can enhance research outcomes, develop innovative teaching methods, and streamline administrative tasks. This workshop provides a platform for learning, idea exchange, and best practice sharing, empowering educators to leverage AI effectively and ethically.

Instructional Methods: 1. Introduction to generative AI and needs assessment (10 minutes) 2. Review examples of using generative AI teaching, research and administrative tasks and potential problems (20 minutes) 3. Break-out into small groups to discuss: how are you (or could you) be using generative AI in (1) teaching, (2) research and (3) administrative activities? Followed by group discussion (25 minutes) 4. Break out into small groups to discuss: what do you worry most about with the increasing use of generative AI? Followed by group discussion (25 minutes) 5. Summary & Conclusions (10 minutes)

Target Audience: educators, clinicians, learners

Learning Objective(s): 1. Describe ways to harness the power of generative AI such as ChatGPT for teaching, research and administrative tasks 2. Apply tips to improve the output from large language models 3. Identify potential ethical implications and risks with using generative AI

WE-5 <u>Calling In / Calling On: Connecting with Calls to</u> Action for Indigenous Physician Wellness and Joy in Work

Chase Everett McMurren, University of Toronto, **Ryan Giroux**, University of Toronto **Michael Dumont**, University of Toronto, **Melanie Osmack**, Indigenous Physicians Association of Canada

Rationale/Background: The National Consortium for Indigenous Medical Education (NCIME) was formed in 2021 to implement Indigenous-led work streams to transform Indigenous medical education and contribute to the delivery of culturally safe care. Indigenous Physician Wellness & Joy in Work (PWJW) is one of the priority action areas. The health & retention of Indigenous Physicians requires an intentional commitment to identifying & addressing the unique conditions faced by medical learners & practicing Indigenous physicians. The PWJW Working Group has developed 18 provisional Calls to Action directed toward various institutions who have the power to enable & implement change to improve the well-being of Indigenous physicians across Canada. These institutions include Faculties of Medicine, provincial & territorial Ministries of Health, Crown-Indigenous Relations and Northern Affairs Canada (CRINAC), & the Indigenous Physicians Association of Canada (IPAC). This workshop offers the opportunity for participants to learn about the 18 provisional Calls to Action & begin to conceptualize how they can translate them into action in their own professional context.

Instructional Methods: The workshop will be anchored by an introduction to the 18 provisional Calls to Action for improving the health of First Nations, Inuit and Métis physicians (& medical learners) from coast to coast to coast. Small group & paired discussions will focus on approaches to implementation that are culturally safe & center the unique strengths & challenges (many) Indigenous physicians face.

Target Audience: Medical Educators & Medical Education Leaders

Learning Objective(s): 1. Describe some of the unique factors that influence wellness and joy for Indigenous physicians in Canada 2. Identify at least one Call to Action that can be immediately addressed / implemented in their professional context 3. Determine collaborators that can support the effective implementation of the Call to Action 4. Design an action plan that intentionally reduces the burden on Indigenous physicians

Block F

WF-1 Removing the invisibility Cloak: Engaging transdisciplinary theories to support diversity, equity and inclusion in medical education.

Michelle Lazarus, Monash University

Rationale/Background: While there are calls to action and attempts to improve diversity, equity and inclusion (DEI) in medical education globally, current practices are not leading to systemic and sustainable changes. As an established transdisciplinary research team, we have developed an integrated conceptual model that draws on theories from diverse disciplines to help explain the theoretical underpinnings of sustainable DEI initiatives. Our model explains how psychology, humanities, and education theories work together to support critical reflection on norms, values and priorities within medical education systems. We developed a companion workshop to support medical educators' development and implementation of sustainable DEI initiatives at their local institutions based on this model. The model integrates theories typically discussed separately, but which we have come to realise overlap in an effective way, and include: cultural hegemony, uncertainty tolerance, uncertainty identity theory, cultural literacy and threshold concept theories.

Instructional Methods: All parts of the workshop include active participation. Part 1: Introduce theories & integrated conceptual DEI model, including: a) brief (<1 min) high quality videos describing relevant theories in plain language and how they work together in the integrated conceptual DEI model; b) current examples to illustrate the theories in practice; and 3) participant opportunities to identify applications of theories across medical education contexts (large group). Part 2: The 'work' in the workshop. Here, participants work together (small groups) to identify DEI initiatives in their own medical education context. This is done in a staged approach whereby participants: a. First identify their vantage point in society b. Explore barriers they have/may encounter when engaging in DEI activities; and c. Finally, explore how to address these barriers using the integrated conceptual model. Part 3: Closing. This is where we discuss (large group) the impact evidence of engaging in DEI work.

Target Audience: Medical Educators

Learning Objective(s): 1. Relate experiences in medical education to the DEI integrative conceptual model. 2. Describe systemic barriers to DEI initiatives in the participants' local education context. 3. Evaluate existing DEI initiatives, and develop a strategy for improving them by applying the DEI integrative conceptual model.

WF-2 Acts of Professional Resistance: A Legitimate Response to Systemic Harm and Injustice

Rachel Ellaway, University of Calgary, Tasha Wyatt, Uniformed Services University, TingLan La, Uniformed Services University

Rationale/Background: The last few years has spurred our community to consider the importance and role of professional resistance in health professions education. Many have raised questions about the working conditions of health care professionals, and broader societal concerns, such as structural racism and racial violence. As such, medical education needs to explicitly teach trainees and faculty members on how to resist social harm and injustice. This workshop will explore the concept of resistance in medical education, distinguish and clarify what might constitute both legitimate and illegitimate forms of resistance, and consider the consequences of learners and educators engaging in acts of resistance.

Instructional Methods: This session will begin with an overview of what constitutes resistance, how it might be classified in our profession, and how acts of resistance negotiate with, (re)produce, or undermine existing power structures. This overview will cover common acts by those who are in subordinated positions. Participants will then be guided through small group discussions on the boundaries around professional resistance. In particular, the discussion will focus on what is considered legitimate and illegitimate forms of resistance given that individuals should only resist to the extent that they are able to continue such efforts without being excluded. Group discussion will then focus on how medical education should prepare and train physicians to engage in legitimate acts of professional resistance. Should resistance be explicitly taught, or perhaps only be encouraged by faculty members? How far should medical education support physicians' acts of resistance, including whether resistance should be included in competencybased assessments? The session will end with closing remarks on the extent to which medical education should prepare students to engage in professional resistance, and effective ways to do so.

Target Audience: Medical Education Faculty and Trainees

Learning Objective(s): 1. Develop an understanding of what constitutes resistance, how resistance could be classified, and why it is important in medical education 2. Identify ways to effectively prepare medical learners and educators to engage in professional resistance

WF-3 <u>Self-compassion: An Essential Resource for Medical</u> <u>Training and Practice</u>

Oksana Babenko, University of Alberta, **Sudha Koppula,** University of Alberta

Rationale/Background: While rewarding, medical training and practice are, by nature, challenging and can result in stress. Internal resources are required to respond adaptively to therapeutic setbacks, clinical uncertainties, and close calls. In other domains, self-compassion has been shown to help individuals maintain a balanced perspective, protect them from negative automatic responses, and enhance their wellbeing. The purpose of this workshop is to: (a) explore the principles of selfcompassion; (b) understand how various teaching practices, and specifically those rooted in selfdetermination theory, may foster or hinder the development of self-compassion in our learners and ourselves; and (c) meaningfully implement those practices that support self-compassion and avoid those that hinder it.

Instructional Methods: This workshop blends large group discussion and small group interactive components. Large group: Participants will be introduced to the principles of self-compassion and empirical evidence that exists in medical training and practice, with opportunity for participants to clarify and ask questions. Small groups: Participants will actively engage in facilitated small group discussions identifying and unpacking teaching and other strategies/activities that support the development of self-compassion, and strategies/activities to avoid that hinder self-compassion; prepared cases for this purpose will be used if needed. We will conclude with a large group interactive discussion and summary of the concepts brought forward during the small group activity.

Target Audience: Educators, Educational Leaders, Learners, Practitioners

Learning Objective(s): 1) Describe the principles of self-compassion and its important role in medical training and practice. 2) Describe teaching and other practices that support or hinder self-compassion. 3) Implement strategies to intentionally support the development of self-compassion.

WF-4 <u>Exploration of complex research phenomena:</u> Mobilizing multiple approaches to qualitative research

Laura Nimmon, University of British Columbia, Meredith Young, McGill University , Sayra Cristancho, Western University, Tim Dubé, Université de Sherbrooke

Rationale/Background: Qualitative HPE research employs a variety of methodologies, data collection methods, and analytic techniques that enrich our ability to tackle complex issues. Mobilizing multiple approaches allow researchers to combine methodologies (e.g., ethnography and constructivist grounded theory), methods (e.g. interviews and observation), analytic techniques (e.g. narrative and thematic analysis) in a way that maximizes the strengths of each to study complex phenomena. However, integrating multiple qualitative approaches into a single study raises questions about how to integrate them, what knowledge each contributes, and whether they are worth the investment of extra time, effort, and complexity. In this workshop, we will share key background information, experience, and lessons learned from designing multimethodological qualitative studies.

Instructional Methods: This workshop will be interactive and problem-based with a balance of didactic and hands-on activities. Didactic lecture (10 min): Brief review of the paradigm of constructivism, the concepts of ontology and epistemology, and areas of focus for this pre-conference workshop: qualitative methodologies, methods, and analytic techniques Think, pair, share (10 min): participants will identify their epistemology and ontology, and describe their experience with qualitative methodologies, methods, analytic techniques. Didactic lecture (10 min): General description of a few methodologies, data collection methods, and analytic techniques that presenters will offer as examples throughout the workshop, and a brief description of important principles when considering a multimethodological qualitative study. Discussion (10 min): Large group brainstorming discussion of phenomena that are amenable to using multiple qualitative methodologies Small group discussion (30 min): World café format wherein participants experience both didactic and hands-on-experience with different approaches to rich data collection (e.g., rich pictures/photo elicitation, sociograms, guided walk) Didactic (10 min): Our team experience and lessons learned from engaging with multi-methodological qualitative research to gain insight into complex phenomena. Large group discussion (10 min): Group discussion focused on practical considerations of multimethodological qualitative work.

Target Audience: Intermediate level scholars interested in combining methodologies, data collection methods, and/or analytic techniques in a qualitative study.

Learning Objective(s): 1. Describe the strengths and limitations, including resource considerations, of combining multiple qualitative methodologies, methods, and/or analytic techniques. 2. Discuss research questions and phenomena well suited for multi-methodological qualitative work.

WF-5 <u>Developing Medical VR Learning Experiences: what</u> it takes, who's involved, and is it right for you?

Paul Milaire, University of British Columbia, **Zachary Rothman**, University of British Columbia

Rationale/Background: Virtual Reality (VR) and Extended Reality (xR) are powerful emerging technologies with the potential for a "significant impact on future postsecondary teaching and learning" (EDUCAUSE, 2020, p.5). The stress of becoming a practicing doctor, difficulties applying existing knowledge in clinical settings, and navigating new and complex clinical environments are challenges faced by today's medical undergraduate students (Hawkins et al., 2021). Medical learners could benefit from increased exposure to clinical experiences in immersive, low-stakes learning environments. Yet the development of educational xR content can be challenging and requires a multi-disciplinary approach to design (Krebs & Pennefather, 2019). UBC Faculty of Medicine's EdTech team has embarked on a multi-year journey of developing high-fidelity, high-impact, immersive VR simulations for Year 2 medical students. By working with learners as designers, prototyping, and piloting the project, Edtech has developed a novel simulation for UBC medical learners. Drawing from their expertise, EdTech producers will guide participants through the process of creating innovative, virtual learning experiences which have the power to address pressing challenges in medical education. Participants of this workshop will come away with an understanding of how to incorporate meaningful VR and xR learning experiences into their programs.

Instructional Methods: Participants will: - Listen to a brief presentation regarding xR technologies, affordances, and development approaches. - Experience, practice, observe and assess actual VR experiences in a live demo format. - Ideate and identify collaboratively with other participants a potential use-case for xR technologies in their teaching context. - Evaluate proposed use-cases through feedback and discussion with all participants. - Create an achievable plan for the development of a virtual and extended reality learning experience.

Target Audience: - Faculty and clinical educators - Educational technology support staff - Students as creators

Learning Objective(s): - Summarize and identify the primary process for developing and incorporating xR content into medical education curricula. - Identify and evaluate appropriate teaching and learning use-cases for xR. - Identify major considerations for incorporating XR in teaching and learning. - Develop an action plan for creating and integrating XR content into curricula.

Block G

WG-1 Navigating Quality Assurance and Enhancement in Medical Education: A Workshop for Successful Implementation

Mandy Moffat, Susie Schofield

Rationale/Background: Quality Assurance (QA) in medical education has transformed into a global norm, with numerous countries formulating national standards aligned with recommendations from the late 1990s by the World Federation for Medical Education. The aim was to demonstrate equivalence through accreditation, supporting the World Health Organization's Human Resources for Health strategy addressing healthcare personnel shortages via migration (Weisz & Nannestad, 2021). The adoption of international standards created a consensus baseline by fostering local and global quality assurance processes intended to elevate standards worldwide. While this marked an improvement, a shift towards continuous quality improvement (CQI) gained momentum as the more effective approach as it emphasized the need to establish a culture of improvement beyond that set by pre-determined QA visit intervals (Al-Shehri & Al-Alwan, 2013). This method not only identifies gaps for early intervention before formal accreditation visits but is recognized as 'Quality Enhancement' (QE) (Barzansky et al, 2015) which embraces both internal and external quality systems.

Instructional Methods: The workshop will blend relevant theory with concrete examples of quality frameworks in order to help emphasize the distinctions and harmonies between QA and QE. Attendees are invited to contribute their own frameworks with examples of their experiences and this will allow the group to explore both the catalysts and barriers to quality enhancement. The core essence woven throughout these activities is to accentuate the paramount importance of practically weaving purpose, context, and logistics together when navigating quality enhancement initiatives.

Target Audience: Designed for individuals with institutional and/or programmatic quality assurance and enhancement roles, as well as program leaders or tutors responsible for continuous reviews to enhance outcomes, this workshop equips participants to navigate the dynamic landscape of medical education QA and QE.

Learning Objective(s): • Distinguish the relevance of the differences and similarities in Quality Assurance and Quality Enhancement • Correlate both QA and QE within the intentions and principles of Programmatic Accreditation (both local and global) • Formulate appropriate approaches to both QA and QE within a range of contextualized intentions.

WG-2 <u>Novel ideas for engaging patient partners in medical</u> education

Angela Towle, University of British Columbia, Carolyn Canfield, University of British Columbia, Darren Lauscher, University of British Columbia, Karen Firus, University of British Columbia

Rationale/Background: Partnering with patients in medical education is increasing, but most activities are one-off, focused on patients sharing their personal experiences with students, and involve a limited number of patient partners. At the University of British Columbia, we are exploring innovative ways to integrate patient partners into a wide range of educational activities to facilitate student learning, develop curriculum and participate in medical school admissions processes, as examples. In this workshop, three fearless patient partners will describe experiences and lessons learned from involvement in various medical school activities. Workshop participants are invited to share their experiences with patient partners in education, and contribute new ideas that they have seen, or would like to see, implemented at their own institutions. The focus will be on principles of engagement, lessons learned and current best practices, from both patient partner and academic perspectives.

Instructional Methods: 10 min: introductions. 20 min: patient partner panel will present examples of their involvement in admissions processes, interprofessional education, committee work, curriculum development, and other educational activities, highlighting guiding principles, best practices and lessons learned. 40 min: small group work to share new ideas for involving patients in medical education, lessons learned and best practices, co-facilitated by patient and academic partners. 10 min: report back from small groups and common themes. 10 min: wrap up: key points, take-home messages, next steps.

Target Audience: Educational decision-makers; health professions educators with an interest in patient / public engagement, students, patient partners.

Learning Objective(s): 1. Describe examples of involving patient partners in the breadth of medical education. 2. Identify additional opportunities for patient partner engagement at their own institution. 3. Develop strategies for implementation.

WG-3 Integrating Deprescribing Competencies into Health Care Curricula: A 'How To' Workshop

Emily McDonald, Queen's University

Rationale/Background: Deprescribing, the art of reducing or stopping medications that are no longer needed or causing more harm than benefit, is an important approach to managing medication overload. However, health care professionals have identified a number of barriers, including the need for more knowledge and skills about how to deprescribe safely. The Canadian Medication Appropriateness and Deprescribing Network Health Care Provider Education Committee recently developed a curricular framework to support deprescribing education. This framework outlines seven essential competencies (mapped to current prescribing frameworks), relevant knowledge and skills, sample teaching and assessment strategies, an example curriculum mapping exercise and a supportive toolkit. This workshop aims to help educators identify curricular gaps and look for efficient and effective ways to integrate deprescribing competencies.

Instructional Methods: This 90-minute interactive workshop begins with a short presentation about the essential knowledge and skills for deprescribing, then uses a World Café approach to identify and share teaching and assessment strategies for integrating deprescribing competencies. Registrants will be guided to the published manuscript in advance and will be able to bring course outlines and relevant materials to share. Participants will rotate through three to four small group facilitated discussions and contribute overall findings to the larger group. The workshop will include the development of individual action plans to incorporate deprescribing competencies focusing on identifying curricular gaps, determining curricular content and considering strategies to teach and assess deprescribing. Proceedings will be documented and shared with participants following the workshops with a follow-up webinar planned to enable sharing of progress.

Target Audience: This workshop will be relevant to educators in the health professions, particularly those in medicine, pharmacy and nursing involved in the design and delivery of entry-to-practice and residency programs, interprofessional education as well as to health professional program accreditors. This will be of interest to those involved in teaching therapeutics, professional practice skills, experiential/clerkship education, and curriculum administrators.

Learning Objective(s): Participants will be able to: 1) describe deprescribing competencies and related knowledge and skill requirements; and 2) develop a plan to integrate deprescribing components into the curriculum.

WG-4 The Learner in Difficulty

Christina Cookson, Western University, **Daniel Grushka**, Western University

Rationale/Background: A learner in difficulty has been defined by Steinert as "a learner who does not meet the expectations of a training program because of a problem with knowledge, attitudes, or skills." (p. 150) (Steinert, 2008) The learner in difficulty is a common problem in postgraduate medical education with one study showing that approximately 10% of learners will present some difficulties to their supervisors. (Reamy & Harmon, 2006). There are many different factors that can contribute to a learner in difficulty that can broadly be categorized under knowledge, attitude and skills. This workshop will outline a systematic approach to working with the learner in difficulty and how to develop a remediation plan based on the learner's unique needs.

Instructional Methods: This workshop will include a brief didactic portion to define the problem and provide an approach to the learner in difficulty. There will be an interactive case discussion to illustrate key concepts. Finally, the majority of the workshop will be dedicated to small group discussion of case study examples.

Target Audience: Medial educators supervising undergraduate and postgraduate learners.

Learning Objective(s): 1. Describe how to identify a "problem learner" and the range of problems this term encompasses. 2. Describe how to manage these resident learning issues including the implementation of learning, remediation and probation plans. 3. Outline the processes involved from remediation to appeal and recognize the inherent challenges in finding solutions that work.

WG-5 <u>Thriving People, Flourishing Planet: Leadership in action within health professions education & beyond</u>

Constance Leblanc, AFMC, Husein Moloo, University of Toronto, Jerry Maniate, University of Ottawa, Ming-Ka Chan, University of Manitoba

Rationale/Background: Leadership is urgently needed to reverse the escalating deterioration of planetary and human conditions that threaten global safety and worsen social inequities (1). Leadership in climate-related, equitydriven healthcare delivery is especially important as healthcare contributes about 5% of emissions globally. Consequences include climate exacerbated morbidity and mortality and amplification of climate events that worsen or destroy ecosystems and living conditions. Structurally and systemically marginalized communities are at a higher risk of climate-related health consequences. Using the lenses of social justice, the healthcare community has a responsibility in co-creating and promoting strategies to: • mitigate our contribution to climate change, inequity, and oppression, • prevent resulting adverse health outcomes, and • adapt the healthcare system to treat present and pending health consequences. We are witnessing a rapidly changing world and there is a moral imperative to right social injustices. We need to redesign both our healthcare and health profession education (HPE) to embrace connection, collaboration, equity, diversity and inclusivity (EDI). In Canada, sustainable healthcare and EDI are strategic priorities of the Royal College, Canadian Medical Association and the Association of the Faculty of Medicine of Canada along with many health partners and supported by the work of CAPE, CASCADES, and CGHC; both will be integrated into CanMEDS2025 (2,3). HPE has a key role to play, and national (and global) input and collaboration are essential. During this workshop, participants co-develop strategies addressing the collective need for planetary health, climate-justice, and social justice in HPE. They will engage critically with current barriers and broaden leadership for systems transformation.

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- Equity, diversity, inclusion, and social justice in CanMEDS 2025. https://www.ncbi.nlm.nih.gov/pmc/articles/PM C10042795

Instructional Methods: - icebreaker/reflection exercises - brief presentation with resources for grounding concepts - liberating structures

Target Audience: Faculty and learners at all career stages who are interested in applying the discipline of leadership to address the intersecting challenges of social inequities, declining health outcomes and ensuring planetary health.

Learning Objective(s): In the context of health professions education: 1. Apply the capabilities of coalition building and systems leadership to improve personal and planetary health. 2. Define specific leadership strategies, pursued over time, to coalesce energy within the health community in support of the goals of thriving people and a flourishing planet.

Block H

WH-1 Strength, Resiliency, and Culture - Changing the Narrative on how we View Indigenous

Darryl Souliere Lamb, Indigenous Primary Health Care Council, **Nicole Blackman,** Indigenous Primary Health Care Council

Rationale/Background: All too often Indigenous mental health is presented through a deficit-based lens, focusing on negative health outcomes such as substance use and high rates of depression and suicide. Without highlighting or explicitly connecting the root causes of colonization and current day anti-Indigenous racism to these health outcomes, only a part of the picture is presented, which further perpetuates the negative stereotypes held towards Indigenous people. IPHCC strives to change the narrative on how Indigenous mental health and wellness is viewed and approached in mainstream healthcare; not only through incorporation of colonization and racism as deterrent factors to health, but also focusing on protectant factors such as connection to culture and self-determination. This includes discussing a different take on indicators measuring mental health wellness towards one that is strengths-based.

Instructional Methods: We strongly believe that learning is best achieved when attendees are active participants. Therefore, the instructional format of the workshop will be IPHCC discussing mental health outcomes and root causes, while exploring an alternative approach to presenting Indigenous mental health through strength-based indicators for approximately 30 minutes. The remaining 90 minutes will be used to have more intimate discussions and an opportunity for reflection, as well as anonymous surveying through Menti-meter so everyone can feel comfortable and safe while participating. When discussing this alternative approach to viewing mental health and wellness, attendees will lead discussions on what incorporation into practice could look like in the clinical world, exploring potential implementation strategies.

Target Audience: Medical learners, academic leaders, policy makers that are interested in being part of the movement to change the narrative of how we view and provide mental health care for the Indigenous population.

Learning Objective(s): Connect root causes as contributing factors to poorer mental health outcomes among the Indigenous population. Describe the importance of protectant factors for mental health for Indigenous peoples. Explore alternative approaches to collect Indigenous mental health data through strength-based indicators.

WH-2 Facilitating student development of self-directed learning skills in the context of small group case- and problem-based learning: A workshop for faculty

Bonny Dickinson, Mercer University School of Medicine, **Keyna Bracken**, McMaster University , **Susan Cline**

Rationale/Background: Self-directed learning (SDL) defined by Knowles is "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes." Medical school accrediting bodies in the U.S. and Canada require learner instruction in and assessment of SDL. Small group case-based learning (CBL) and problem-based learning (PBL) are implemented by many medical schools and offer unique opportunities for students to develop SDL skills. This session provides faculty with tools to facilitate, model, assess, and document SDL during CBL and PBL in the preclinical medical curriculum.

Instructional Methods: 1. Introductions, learning outcomes, and Poll Everywhere question: What are your own experiences/challenges implementing SDL in CBL or PBL? (10 min). 2. Brief overview on differences between CBL and PBL in the literature and how they may evolve (5 min). 3. Guided discussion on SDL skills and the U.S. and Canadian accreditation requirements for SDL (10 min). 4. Participants share how they have engaged in SDL when preparing for CBL or PBL (10 min). 5. Approaches to facilitating student development of SDL in CBL and PBL. Provide prompts to help participants model SDL (document your own SDL process and share with students) (10 min). 6. Thought question: What is the most difficult aspect of student SDL to assess? (10 min). 7. Novel worksheet for assessing student SDL skills. View videos from McMaster's tutor training module and use worksheet to evaluate SDL (20 min). 8. Approaches to collecting evidence to meet accreditation requirements; conclude with audience questions (15 min).

Target Audience: Faculty using case- or problem-based learning to facilitate student development of SDL skills

Learning Objective(s): 1. Define the components of SDL and describe how SDL skills are requisite to lifelong learning 2. Utilize small group CBL or PBL to facilitate student development of SDL skills and explicitly model SDL to enhance student development of these skills 3. Evaluate student development of SDL skills and provide supporting evidence to meet accreditation requirements for SDL in the undergraduate medical curriculum of Canada and the U.S.

WH-3 Advancing partnership with patients, families and persons with lived experience in medical education

Angela Towle, University of British Columbia, **Annie Descoteaux,** Université de Montréal, **Darren Lauscher,**University of British Columbia, **Mathieu Jackson,** Centre of
Excellence on Partnership with Patients and the Public

Rationale/Background: Socially accountable medical education programs integrate patient and public perspectives into the fabric of education. Medical schools and other organizations responsible for medical education are at different stages along the journey to engage patients as partners in education and to embed patient and public engagement at an institutional level. This provides an opportunity to share, collaborate, and move 'emerging' practices into 'best' practices through collective action, evaluation and research. In this workshop we will present preliminary findings from an environmental scan of patient engagement in medical education across Canada. We will then present examples of patient partnerships in education at an institutional level, including at the University of British Columbia and the University of Montreal (Centre of Excellence on Partnership with Patients and the Public). We will engage workshop participants in a discussion of how to advance the field. For example: what are the challenges and opportunities that participants are facing at their institution? Would educators, patients, learners and leaders involved in the work of integrating patients into medical education benefit from the establishment of a social network or community of practice to advance individual and collective goals? What would be the purpose and activities of this network?

Instructional Methods: Welcome, introductions, housekeeping (10 min) Presentation on the current state of patient engagement in medical education across Canada (10 min) Examples of patient engagement in medical education, including UBC and CEPPP (15 min) Small group discussion: What is your current state of engagement? What are the opportunities and challenges? How can we advance the work individually and collectively? (35 min) Large group discussion: best ideas from your small groups (10 min) Wrap-up: Next steps - individual and collective (10 min)

Target Audience: Health professionals / educators with an interest in patient / public engagement; educational decision-makers; students; patient/family partners

Learning Objective(s): 1. Describe the landscape of patient engagement in medical education across Canada. 2. Discuss opportunities, challenges and emerging practices regarding patient engagement in medical education, in national and local contexts. 3. Contribute to collective advancement of patient engagement in medical education via a network of educators, leaders, students and patients.

WH-4 Conflits d'intérêts, biais et sécurité pédagogique: atelier réflexif

Clara Dallaire, Université de Montréal, Julie Desmeules, Université de Montréal

Rationale/Background: D'une part, le développement professionnel continu (DPC) a une longue tradition de gestion des biais et conflits d'intérêts et d'autre part, le milieu académique universitaire a un souci constant de s'assurer que les étudiants peuvent évoluer dans un milieu pédagogiquement propice aux apprentissages. Cet atelier se veut une réflexion et un partage de ce qui existe dans les milieux canadiens et de voir comment les meilleures pratiques du continuum de formation peuvent être utilisées par toutes les parties prenantes.

Instructional Methods: Cet atelier de 90 minutes est dispensé en français et comportera au moins soixante minutes de discussion en petit groupe alternant avec des plénières en grand groupe. Il sera demandé aux apprenants d'apporter la documentation nécessaire provenant de leurs institutions sur la thématique proposée afin de faire un partage et d'alimenter la discussion. Lors de la première partie, les participants et participantes effectueront un exercice réflexif sur les pratiques actuelles de leurs institutions au regard de la thématique proposée et ce à tous les niveaux du continuum d'apprentissage (prégradué, résidence et DPC). Ceci sera suivi d'une discussion en plénière sur les enjeux rencontrés pendant les activités pédagogiques. S'ensuivra une réflexion en petit groupe et en grand groupe en utilisant le modèle SWOT (FFOM) pour promouvoir un environnement d'apprentissage sûr pour les apprenant(e)s. En finale, la plénière permettra de discuter et partager des outils qui existent et de réfléchir sur des outils à développer

Target Audience: Toute personne impliquée dans toute activité éducative du pré-gradué au développement professionnel continu

Learning Objective(s): 1- Décrire des pratiques actuelles sur les conflits d'intérêts, les biais et la sécurité pédagogique. 2- Comparer et contraster les concepts de conflits d'intérêts, biais et sécurité pédagogique 3-Énumérer des bénéfices potentiels pour les apprenant(e)s et enseignant(e)s d'améliorer ces processus afin d'établir un climat d'apprentissage sain et transparent.

WH-5 <u>With All Due Respect: Navigating Learner</u> Mistreatment in 2024

Amanda Bell, McMaster University , **Christina Grant,** McMaster University , **Margaret Boyce,** McMaster University

Rationale/Background: Mistreatment of learners is an alltoo-common occurrence in Medical Education (Abate & Greenberg, 2023), with > 40% of medical students & > 60% residents across the country experiencing mistreatment during their training (Bell et al. 2021). However, > 50% of mistreated learners do not reach out to inform their schools or programs, due to fear of negative repercussions and potential retaliation, doubts about confidentiality, and a lack of confidence that the system will change (Bell et al, 2021; Vanstone et al, 2023). In this workshop we will draw on our past and ongoing research, as well as knowledge that we acquired while establishing the Office of Learning Environment & Mistreatment (OLEM), within the Faculty of Health Sciences at McMaster University, to provide tools for helping learners, medical educators, and administrators to better understand the scope of the issue, consider opportunities for intervention, identify supports needed. and thereby move towards systematic change.

Instructional Methods: 20-minute plenary Setting the scene by presenting national data and sharing our experiences addressing learner mistreatment at McMaster University, Faculty of Health Sciences. 20-minute small group discussion Share and analyze experiences at other institutions. 15-minute role playing exercise Exploring "grey zone" scenarios where there is discordance between how learners and educators define mistreatment (Bell, 2019: 64). 20-minute plenary Commitment to action with participants' home institutions

Target Audience: medical learners, educators, administrators

Learning Objective(s): Define medical learner mistreatment and become familiar with prevalence and scope of behaviours considered mistreatment. Identify barriers to reporting mistreatment and consider how to overcome them. Develop awareness of "grey zone" scenarios where learners and educators are discordant in their perception of mistreatment. Commit to practical next steps to address mistreatment within participants' contexts.

Block L

WI-1 <u>Understanding Indigenous social determinants of</u> health from an Indigenous lens.

Dakota Recollet, Nicole Blackman, Indigenous Primary Health Care Council

Rationale/Background: First Nation, Inuit, and Métis (FNIM) peoples disproportionately face inequities within the healthcare system. To address these disproportions, it's important to understand that various dimensions of health inequities exist, which are commonly referred to as social determinants of health (SDOH). These are broadly defined as the conditions in which people are born, grow, work, live, and age. From a Western context some of these conditions include income and social status, education and literacy, employment, physical environments, early childhood development, etc. However, for FNIM individuals and communities, there are additional determinants beyond those specified by Western scholars and practitioners. For example, factors that negatively impact health outcomes include colonization and racism. Whereas protectant factors may be connection to culture and land, holding language, or self-determination.

Instructional Methods: We strongly believe that learning is best achieved when attendees are active participants. Therefore, the instructional format of the workshop will be IPHCC presenting the Indigenous SDOH model and discussing the differing factors within in, followed by interactive exploratory exercises on how to implement within practice.

Target Audience: medical learners, academic leaders, policy makers

Learning Objective(s): 1. Learn more about differing factors within the Indigenous SDOH model. 2. Gain a better understanding of root causes to health outcomes (i.e., colonization and racism), as well as protectant factors (i.e., connection to culture, language, land, and self-determination). 3. Explore strategies to incorporate Indigenous SDOH model within practice.

WI-3 Allyship as a catalyst for change in medical education

Kristine Gibson, Western Michigan University, **Marc Zucker**, University of Ottawa, **Pavan Bang**, Newark Beth Israel Medical Centre

Rationale/Background: Allyship is the "actions, behaviours, and practices that leaders take to support, amplify, and advocate with others, especially with individuals who don't belong to the same social identity groups as themselves."1 Faculty have a privileged position to build communities within their various environments and can act against inequities and racism 2,3. Faculty should leverage their strength and privilege through allyship to move towards health equity and justice. We interact with individuals who may need uplifting and amplification to reach their full potential, such as patients, learners or colleagues from an equity-deserving population facing discrimination or oppression. Forming communities and finding meaning at work can be done by utilizing allyship skills to help individuals, while contributing to social justice. This workshop will define allyship in its many forms (e.g. ally to co-conspirator)4. Armed with this knowledge and an exploration of one's own power, privilege and positionality, participants will be empowered to explore their potential as effective allies in medical education. Through scenarios, participants will practice allyship. To conclude, participants will plan strategies for implementing allyship in their own educational environment.

Instructional Methods: The workshop begins with introductions and an establishment of psychological safety, respectful and productive conversations around power and discrimination. Participants will share reactions to a multimedia positionality exercise. A brief didactic session follows on allyship and its power in medicine. Participants will share their own experiences of being an ally or receiving support. Scenarios in small groups will provide practice for allyship strategies. Participants return to the large group to share thoughts and ideas generated from the scenarios. There will be a demonstration on what to do when allyship goes wrong. Facilitators will encourage participants to commit to change and formulate plans towards allyship actions in the future. Participants will be provided with resources for ongoing learning.

Target Audience: All conference attendees

Learning Objective(s): 1. Define and identify allyship in its various forms in medical education 2. Reflect on one's power, privilege, positionality and allyship capacity 3. Practice effective allyship scenarios and distinguish ineffective allyship 4. Share and discuss real stories of allyship in medicine

WI-4 Writing Effectively in the Medical Sciences

Imran Bagha, Western University

Rationale/Background: "Surely, the scientist should write not so that she can be understood, but so that she cannot be misunderstood" (a). Writing effectively is a critical skill in medical education, research, and knowledge dissemination. Clear, concise writing has the ability to inform in a manner than reduces error (1). It can determine whether a paper is published, funding secured, and ultimately how effectively research is distributed and acted upon. Conversely, bad writing often prevents or delays the publication of good science (2). Academic institutions, physicians, and medical researchers have been called upon to improve their writing and provide curriculum on writing to medical trainees (3). This workshop is an attempt to respond to this call to action. In it's first year at ICAM, participants rated this session as highly relevant (96.2%) and highly valuable overall (94%). Written feedback included comments such as "Great workshop; very useful and interactive/helpful exercises" and "best session of the conference." *References* a. Heard, S. B. (2022). The scientist's guide to writing: how to write more easily and effectively throughout your scientific career. Princeton University Press. 1. Collier, R. (2017). A call for clarity and quality in medical writing. CMAJ, 189(46), E1407-E1407. 2. Day, R.A. (1995) Scientific English: A Guide for Scientists and Other Professionals. (2nd ed.) California: Oryx Press 3. Malik, B. (2017). The value of writing skills as an addition to the medical school curriculum. Advances in medical education and practice, 8, 525.

Instructional Methods: Participants work through a variety of interactive activities to learn where and when they will encounter writing pitfalls, what they can do to avoid them, and how to increase the effectiveness of their own writing. Four lessons are covered in this workshop: logic & structure, sentence structure, active voice, and improving clarity. Each lesson is first defined and supported by examples, which the participants analyze using multiple choice or short answer format. Then, several longer exercises allow participants to actively practice multiple key strategies at once by creating and reorganizing short passages using included worksheets. Finally, a short quiz at the end helps ensure participants retain the key points. The majority of this workshop (80%+) involves active participation.

Target Audience: PhD students Medical students Medical research writers: full-time academic professionals, residents, and research staff

Learning Objective(s): Practice effective high-order (organization, structure, logic flow) writing techniques. Identify and avoid 6 common medical writing pitfalls Leave this session with 3 clear, measurable strategies to immediately implement in your own writing: a) Implement the 'known to new' writing strategy to increase logical connections for your reader and improve flow b) Determine the necessary indications for using active voice c) Utilize parallel structure to increase clarity

WI-5 Wellbeing 3.0: A Roadmap for Applying the principles of the Okanagan Charter and Health Promoting Learning Environments to Medical Education

Cheryl Goldstein, University of Alberta, **Melanie Lewis.** University of Alberta, **Victor Do**, University of Toronto

Rationale/Background: To adequately address systemic wellbeing challenges, medical education should adopt a health promoting education framework during program design. Health promoting education settings "create conditions that are conducive to health through policies, services, and physical/social conditions". The international Okanagan Charter can be adopted to serve as a strategic framework for creating health promoting environments in medicine. The Okanagan Charter defines health promoting learning environments as "infusing health principles into all aspects of their operations, practices, mandates and business". The first call to action highlights the importance of embedding health into all aspects of campus culture, across the administration, operations and academic mandates. To develop a health promoting medical learning environment, strategic objectives include: 1) embed health in all policies; 2) develop sustainable, supportive spaces; 3) create thriving medical communities and culture; 4) encourage, support, and sustain meaningful personal development; 5) review, develop, and strengthen Faculty-health services; and we added 6) collaborate and invest in continuous improvement. These strategic priorities form the basis for a comprehensive, multi-pronged approach to addressing learner wellbeing, which we will explore in greater detail during this workshop.

Instructional Methods: Introduce the Okanagan Charter and HPLE concept through interactive lecture(15min) Small group: co-develop initial implementation plan for creating an HPLE committee(75 mins) Introduction will be a didactic overview of HPLE and Okanagan Charter, with polling for interaction. 12 practical tips will be explored using a mix of small groups and an overarching case study. The wrap up will return to the large group format for sharing of ah-ha moments.

Target Audience: Introductory workshop for all learners and faculty involved in medical education across the learning continuum who want to improve individual and organizational wellbeing. Given the national efforts to adopt and implement the Okanagan Charter, this workshop will help individuals implement in their local contexts.

Learning Objective(s): 1) list the strategic directions required to develop and foster of a health promoting learning environment (HPLE)/enact the Okanagan Charter; 2) incorporate twelve important structural and strategic direction focused tips for creating an HPLE; 3) develop a mixed-methods evaluation strategy to refine and scale efforts locally in programs or across Faculties.

Block J

WJ-1 Deconstructing Race in Academic Medicine

Anjali Menezes, McMaster University , Eniola Salami, University of Alberta, Jerry Maniate, University of Ottawa, Sukhveer Bains, Western University, Justin Lam, University of Toronto Ruth Chen, McMaster University, Patricia Farrugia, McMaster University, Aneez Esmail, University of Manchester

Rationale/Background: Equity research has gained momentum across various fields, highlighting how imperative it is to understand how the colonial history of medical practice has embedded racism into our institution, influencing individual and organizational processes. As research scholarship creates knowledge, it is essential for us to be critical of knowledge itself. Who's ways of knowing are recognized? Who's experience is counted as valid? It is the hierarchies in academia that perpetuate the exclusion and disengagement of the very communities that health equity research purportedly serves. We cannot dismantle racism nor improve the lives and access to equitable health for racialized people without addressing the social structures within which racism functions. Colonialism continues as our stories and knowledge are stolen in the field that is supposed to be forging a more equitable reality. This workshop aims to provide a critical lens that will equip attendees to view race and the inclusion of racialized peoples in medical research in a new light and value non-white sources of knowledge and ways of knowing.

Instructional Methods: The workshop will use facilitated small group reflections and dialogue to develop and deepen our critical consciousness, exploring how racism has become institutionalized (thus, unconsciously enacted and embedded in our everyday practice) in medicine. We will then use these concepts to critically analyze current research practices, and explore solutions - empowering participants to decolonize medical research methodologies. Central to our instructional methods are the lens and authority of experience brought by the racialized facilitators and the larger, exclusively racialized DARe Group Collaborative.

Target Audience: Any healthcare professional or learner conducting or consuming interacting with medical research.

Learning Objective(s): Develop a critical consciousness to understand how systems of structural and institutional oppression are sustained. Evaluate how medicine has created and perpetuated the systemic oppression of racialized peoples. Adapt standard critical appraisal skills to include an antiracist and anti-oppressive praxis to develop research initiatives that disrupt racism in the medical profession, in allyship with racialized communities.

WJ-2 Skill-up for Accreditation: Tools and Best Practices

Fitri Gagne, University of Manitoba, **Frances Dang**, University of Manitoba, **Patricia Shi**, University of Manitoba, **Ricardo Soriano**, University of Manitoba

Rationale/Background: Accreditation bodies across health professions education (HPE) are shifting from a periodic regulatory compliance model to a system of ongoing demonstration of solid outcomes and quality indicators. This model and its necessary self-studies, data/document management and coordination, as well as support for committees and logistics for site visits and post-accreditation status reports, account for a permanent administrative workload for HPE programs. The time needed to prepare any program for an accreditation full site visit ranges from 12 to 18 months. Indirect costs towards accreditation, such as faculty time, have shown to be one of the largest resources spent by post-secondary institutions (Woolston, 2012). A centralized provision of accreditation administrative services at institutions seeking multiple accreditations is a costeffective way of mitigating this administrative impact while preserving institutional memory and sharing of best practices. Since 2017, the University of Manitoba has implemented a centralized approach to accreditation through the establishment of the Integrated Accreditation Unit (IAU). The IAU supports the accreditation processes of all educational programs in the colleges of Medicine, Nursing, Pharmacy, Dentistry and Rehabilitation Sciences by the provision of a comprehensive framework and the use of standardized tried-and-true tools. To date, the IAU has facilitated more than 22 site visits, produced close to 40 accreditation reports, and conducted over 700 consultation meetings across HPE programs. The IAU has accrued useful tips, practical tools and best practices that may be useful for other post-secondary education institutions.

Instructional Methods: Participants' knowledge and assumptions about accreditation will be assessed using five real-time interactive polls (15 minutes), followed by a short didactic presentation on tips and tools (20 minutes). Participants will actively engage in facilitated small group discussions (3x15 minutes: building a timeline, reflection on their institutional culture, interpreting standards) and two large group discussions (2x5 minutes: common challenges, final debrief).

Target Audience: Anyone who wants to learn about accreditation in higher education.

Learning Objective(s): At the end of the session, participants will be able to (1) identify and reflect on common challenges in accreditation processes (2) apply practical tools to improve the outcomes of any accreditation process.

WJ-3 Ending the Practice of Race Correction in Health Care: Lessons from Canada and the Way Forward for Global De-adoption

Lana James, Queen's University, Pat O'Campo, Unity Health Toronto, Jo-Ann Osei-Twum, University of Toronto, Gbolahan Olarewaju, University of British Columbia, Saleem Razack, University of British Columbia

Rationale/Background: Race correction is a pervasive and harmful practice that delays or denies timely access to life-saving health services for Black people. As identified by the United Nations Working Group of Experts on People of African Descent, Black people experience anti-Black racism when accessing health services in Canada. Race correction is a blatant example of this. Race correction is unscientific and based on the discredited polygenesis theory that places Black people at the bottom of the racial hierarchy. This practice occurs when health care providers use calculations that incorrectly adjust laboratory test results and values for Black people. Race correction spans numerous medical disciplines, including nephrology, pulmonology, cardiology, and obstetrics (1). Canada-US Coalition to End Race Correction in Health Care (2) is implementing a systematic evidence-based approach that draws upon de-adoption theory to eliminate race correction from Canadian health services and address clinician-induced inequities and their population-level impacts. According to the literature, race correction meets the criteria for de-adoption (3). This is because 1) race correction is shown to be unsafe and causes harm to patients, 2) race correction is of little to no value to patients, and 3) better clinical practices exist that are of value to patients. This workshop responds to the suffering and premature mortality race correction causes to Black people. It will highlight the role medical educators have in the urgent de-adoption of this harmful practice.

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Instructional Methods: Following an overview of race correction, CU-CERCH experts will guide attendees through two case examples/vignettes. In small groups, attendees will discuss a final case example/vignette, and the workshop will close with a discussion about how de-adoption supports ending the practice of race correction.

Target Audience: Medical educators, trainees, and practicing clinicians

Learning Objective(s): By the end of this workshop, attendees will be able to: 1. Identify race correction and state examples of race correction from medical education, research electives, clinical and public health practice; and 2. Contrast de-adoption approaches that are sustainable, systems, and evidence-based versus approaches that are unsustainable, ad-hoc, and non-integrated.

WJ-4 <u>Coaching for Wellbeing in Education through</u> Reflection and Dialogue

Nirit Bernhard, University of Toronto, **Susanna Talarico**, University of Toronto

Rationale/Background: Health Professions educators must prepare trainees to appreciate the importance of balancing personal and professional priorities, incorporate self-care and insight into any challenges faced. This concept is especially critical now in view of high levels of burnout and staffing shortages in health care. To support wellbeing and promote dialogue, we have developed a longitudinal reflective practice curriculum that involves regular group and individual meetings between faculty and learners in a facilitated format over the four-year MD Program. Active participation in difficult topics is encouraged with sessions themes often related to health care inequities and are meant to challenge assumptions and prompt discussion. The sessions are interspersed with regular progress review meetings that allow for mentorship and coaching for performance change using the R2C2 model. Although physical wellbeing, burnout, and resiliency are touched upon as themes for conversation, the informal curriculum, of relationship building, is perhaps the most effective component of the curriculum.

Instructional Methods: This workshop will allow participants to build their skills of coaching and how to foster reflective practice to facilitate learner wellness. Our approach to supporting wellness through a health professions curriculum targeted at reflection and dialogue will be described briefly. Included in this overview will be the concept of incorporating EDI related thematic sessions and how to coach for performance change. Conversations around professional responsibilities, personal and work goals are discussed together with wellness through a personal learning plan. The bulk of the workshop will be interactive, with the opportunity for participants to simulate a small reflective practice group in breakout sessions in a facilitated way and followed by debriefing opportunities. After another demonstration, they will have an opportunity to engage in role-play coaching around wellness. Lastly, participants will develop an action plan of how this approach might be adapted or implemented to their own education context.

Target Audience: Health Professions Educators at all levels

Learning Objective(s): 1. Discuss how a curriculum based in reflection and dialogue supports learner wellness 2. Describe an approach to coaching for wellness and performance change 3. Participate in and facilitate a small reflective practice group and coaching conversation 4. Develop a plan to implement a curriculum that incorporates coaching and wellness

WJ-5 Education Policy: What is it, why is it relevant, and how can I use it to build more effective education research and innovation?

Lawrence Grierson, McMaster University, **Meredith Vanstone,** McMaster University

Rationale/Background: Education policy shapes the context and influences the outcomes of medical training, but is often overlooked and not fully appreciated when evaluating the success of education interventions or studying the experiences and behaviours of learners. Policies are systemic decisions and conscious choices that lead groups to action or deliberate inaction.(1) They are typically understood as formal written documents that must be translated by actors such as patients, trainees, educators, researchers, managers, legislators, and administrators. (2) However, this translation may prompt behaviours that may not be aligned with the policy's formal intent. In this way, policy also drives informal, unwritten practices.(3)

Instructional Methods: This workshop introduces participants to policy theory and offers guidance on how to incorporate this knowledge into education, research, and evaluation practices. The intent is that participants will be able to understand the policy environment which shapes their own education research and practice, and incorporate this understanding into the way they design research studies and education innovations. Facilitators will begin with an interactive presentation of definitions and concepts, which participants will use to describe the education policies that shape their professional environments. Attendees will progress to small group activities in which they map out the policies which are relevant to their own education research/innovation practice. Along the way, the facilitators will share examples of working with local and transjurisdictional decision-makers (e.g., College of Family Physicians of Canada) to shape and change education policy, highlighting how education policy elements can be incorporated into education reform, research designs, and program evaluations.

Target Audience: Medical educators, education researchers, and education leaders interested in understanding how and why policy shapes medical learning and practice, leveraging this knowledge to produce contextually-relevant results and interventions.

Learning Objective(s): • Define education policy and delineate the relevance within professional environments • Construct a map of education policy elements that influence clinical/educational/research practices • Identify opportunities to use education policy in their own work, including for example interpreting research findings, understanding learner behaviour, designing effective education interventions.

Dedicated Poster Sessions

PME-01 <u>Taxonomic and functional variations in dental</u> plaque samples among Manitoba children with early childhood caries or caries-free

Mohd Wasif Khan, University of Manitoba

Background/Purpose: Tooth decay in the primary dentition of children less than 72 months of age is known as early childhood caries (ECC), affecting approximately half of the children worldwide. This study explored the multifactorial aspects of ECC by utilizing a cohort of 554 children. The study aims to examine taxonomic and functional profiles of ECC microbiome in dental plaque samples. The impact of ECC on oral health-related quality of life (OHRQoL) and the role of nutrition on ECC were also evaluated.

Methods: Dental plaque samples were subjected to 16S rRNA and ITS1 sequencing and data was analyzed using Qiime2 and PICRUSt2. We used statistical and machine learning models to identify significant variables in both taxonomic and functional profiles, and to classify ECC and caries-free samples. To evaluate the role of OHRQoL and nutrition, the early child oral health impact scale (ECOHIS) and NutriSTEP questionnaires, univariate and multiple regression models were used.

Results: We observed that Streptococcus mutans and Candida dubliniensis were significantly enriched in ECC samples, whereas Neisseria oralis was associated with caries-free samples. Among the top bacterial pathways, ADP-L-glycero- β -D-manno-heptose and aerobic respiration I pathways were significantly different between the two groups. Furthermore, a significant association was found between ECC outcomes and ECOHIS score.

Discussion: Our study analyzed how the oral microbiome and determinants of oral health influence ECC risk or protection. Our findings offer valuable insights into ECC and serve as a guide to help prevent the occurrence of caries in children and its effective management.

PME-02 Medical Researcher

Zackary Tsang, University Health Network

Background/Purpose: According to the Royal College's latest report, only 25% of Competence by Design (CBD) components have been implemented as intended. Surgical specialties face hurdles impeding implementation due to heavy workloads and administrative concerns with Entrustable Professional Activity (EPA) requirements. Notably, surgical case logging, a valuable tool for documenting clinical experiences, has not been evaluated sufficiently within CBD implementation. We present a novel surgical case logging system within 'ELMSpace', a competency-driven mobile education platform. ELMSpace integrates EPA-specific microlearning modules (MLMs) and surgical logs, priming residents for EPA assessments and fostering CanMEDS milestone mastery. Our objective is to evaluate the efficacy of our logging system in assisting CBD implementation.

Methods: A cohort of 30 surgical residents from the Temerty Faculty of Medicine at the University of Toronto were recruited. Residents received an introductory tutorial and navigated through the case logging system. Each log entry could be uploaded to a personal repository, where residents engaged in narrative reflection and CBD-based self-evaluation. Interviews, conducted before and after ELMSpace enrolment, assessed the utility and applicability of our logging system. Log engagement, performance metrics, and self-reported EPA completion were also evaluated.

Results: In the early stages of our case log integration, 14 PGY-1 residents have been recruited over 1 month. EPA-specific self-evaluation questions have been generated for 84 procedures. Preliminary feedback displays good log adherence and swift entry completion, supporting the efficacy of the logging system.

Discussion: The development of competency-based surgical logs supports residents on their certification journey, fostering reflective practices and improving learning outcomes within CBD implementation.

PME-03 <u>Bridging Gaps in Generalism and Equity, Diversity,</u> and Inclusion (EDI) by Assessing Simulated Cases

Thomas Soroski, University of Alberta

Background/Purpose: Simulated cases are used to illustrate pathophysiology, clinical reasoning, and care planning. Medical education has recently focused on better incorporating Generalism and Equity, Diversity and Inclusion (EDI) into curriculum. This project encompassed a targeted review of preclerkship simulated cases to identify areas of improvement.

Methods: Forty-nine cases were evaluated using The Toronto Generalism Assessment Tool (T-GAT) and a novel EDI tool adapted from Krishnan et al.'s 2019 "Race and Culture Guide for Editors of Teaching Cases". Questions were scored on a 5-point Likert scale to determine how well each topic was demonstrated. Average scores were determined; T-GAT and EDI scores were then compared.

Results: Average Generalism question scores ranged from 3.18 to 4.66, whereas average EDI question scores ranged from 1.31 to 4.89. All categories of identity diversity were underrepresented within cases, with the exception of same-sex couples. A weak positive correlation was noted between Generalism and EDI scores (r2=0.25).

Discussion: Cases scored well across generalism domains, with "advocacy" receiving the lowest score. For EDI, all cases consistently scored low regarding content on racial and ethnic health disparities and social and structural determinants of health (SSDOH). Cases could benefit from more examples of SSDOH and their relationship with patient behaviors and treatment planning. An important skill for medical students to develop is the ability to identify and advocate for SSDOH specific to their patient's needs.

PME-04 Challenges associated with rural/remote placement and suggestions on how to best draw IMG physicians to Saskatchewan

Tanya Robertson-Frey, University of Saskatchewan

Background/Purpose: The recruitment and retainment of health care providers in rural/remote communities in Saskatchewan has been an ongoing challenge. Saskatchewan has relied heavily on international medical graduates (IMGs) to help fill positions in these communities. The purpose of this project was to determine challenges associated with rural/remote placement in Saskatchewan and garner suggestions on how to best draw IMG physicians to the province.

Methods: Twenty IMG physicians who reported that they were or had practiced in Saskatchewan participated in virtual semi-structured interviews. Transcripts were analyzed using thematic analysis in NVIVO.

Results: Participants identified several overarching themes related to challenges associated with rural placement. Challenges included 1) the community (e.g., accommodations, amenities, faith-related activities); 2) personal adjustment (e.g., family, weather, isolation, lack of anonymity); and 3) work-related (e.g., emergency services, resources, pay structure). Participants had several suggestions on how IMG physicians could be drawn to Saskatchewan. The following themes were mentioned as suggestions for a more comprehensive IMG program in Saskatchewan: More information on provincial programming, IMG orientations for rural placement, less requirements for licensure, housing initiatives, increased incentives and resources, increased amenities in smaller communities, prioritization of IMGs with families or who are already Saskatchewan residents, support networks and community awareness, assessment of physiciancommunity fit, and physician integration into the community.

Discussion: The overall intention of this project is to improve the availability and quality of healthcare services in Saskatchewan by increasing the number of qualified physicians, especially in underserved areas.

PME-05 <u>Development and Implementation of an interdisciplinary Faculty Development (FD) orientation for teachers at a new academic site</u>

Allyson Merbaum, University of Toronto

Background/Purpose: University of Toronto's Department of Family and Community Medicine added a new teaching site at Humber River Hospital, an urban community-affiliated hospital in a high-needs area of Northwest Toronto. To prepare family physicians and those from other disciplines to train FM learners, an intensive interdisciplinary FD orientation was developed and delivered in Spring 2023.

Methods: A literature review on new faculty orientation was undertaken. A needs assessment was conducted in order to tailor the sessions to the audience's learning goals. Two in-person sessions of 2-2.5 hours each were designed and led by the new site education leads, and included opportunity for small group work, discussion and networking. Program evaluation aimed to understand the most helpful elements and relevant take-home points, as well as areas for improvement.

Results: 43 attendees participated in the sessions, including 16 community family physicians and 26 hospital-based focused practice family physicians and specialists in other disciplines. The top priority topics included learning about the new FM program, and assessment and evaluation of learners. The highest rated elements were enhancing feedback and networking with colleagues.

Discussion: A unique aspect of this FD program was integrating FM teachers with those who will be teaching FM learners in other disciplines, with the specific goals of ensuring the learning environment is both FM- and learner-centred and fostering collaboration across the program. Future goals are advanced FD based on evolving needs.

PME-06 Evaluating the Effectiveness and Impact of the University of Toronto STEAM Design Program: A Pathway to Equity in Healthcare and STEM

Bianka Bezuidenhout, University of Toronto

Background/Purpose: Despite efforts to promote equity and diversity, minority and financially disadvantaged groups face underrepresentation in healthcare and STEM professions. To address this issue, the University of Toronto's Temerty Faculty of Medicine founded the STEAM Design program. In July 2023, the program operated in-person, hosting 50 high school students from equity-deserving backgrounds across the Greater Toronto Area. This study assesses the effectiveness, feasibility, and acceptability of the STEAM-D program.

Methods: While receiving a high school science credit, scheduled programming spanned four weeks. Students attended several sessions including a diverse speaker set of healthcare professionals and researchers, group work sessions for their own research project, mentorship sessions, and skill-based workshops. Weekly and end-of-program surveys were administered and completed by 96% of students.

Results: The cohort included 66% female and 34% male from grades 10-12 with mean age being 16 years old. Demographics included: 40% Black,18% Filipino, 14% East/Southeast Asian, and 28% other. Out of a score of 5, students provided an average score of 4.88 (SD 0.33) for the program's ability to educate on STEM career paths, and 4.83 (SD 0.43) for the program's ability to connect racialized students and professionals in health sciences.

Discussion: The STEAM-D program prioritizes underrepresented communities, which promotes equity in healthcare and STEM. This study's significance lies in its potential to demonstrate the effectiveness of this program, offering insights for the development of future equity-focused initiatives, and inspiring a renewed commitment to nurturing underrepresented youth.

PME-07 Ten Tools and Strategies for Teaching Visually Impaired Students in Post-Secondary Life-Science Programs

Inaya Seraj, Dalhousie University

Background/Purpose: With the ultimate goal of providing an inclusive curriculum and meeting Equity, Diversity, Inclusion and Accessibility (EDIA) obligations, we systematically reviewed tactile resources used by a visually accommodated student in five undergraduate science courses.

Methods: Through eight weekly meetings, we reviewed the effectiveness of raised line drawing boards, tactile graphics, and 3D anatomical models in meeting course learning outcomes. We consulted multiple stakeholders composed of a visually accommodated student, non-accommodated peers, an accessibility-experienced TA, and course instructors. We explored barriers to implementation, including time commitment, cost, and developed resources for use in multiple undergraduate science courses.

Results: We identified ten effective accommodations for visual challenges, seven tangible tools (e.g., anatomical models) and three pedagogical practices (e.g., reduced time pressure on assessments). These were categorized in relation to content delivery, independent study, collaborative study, and/or assessments. We identified barriers to implementation and explored viable in-house solutions with the aim of preparing resources for future courses.

Discussion: Through a collaborative approach, we established practices for educators to effectively teach inherently visual disciplines such as science and medicine. These guidelines ultimately enhance post-secondary student experiences and reduce the need for accommodations in striving for a Universal Design for Learning.

PME-08 <u>A mechanism to promote, manage and consult research activities within Undergraduate Medical Education.</u>

Irene Ma, University of Calgary

Background/Purpose: In response to the Accreditation Standard 3.2-2, the Cumming School of Medicine (CSM)'s Undergraduate Medical Education (UME) program formed a Research Committee (UMERC), lead by the Assistant Dean of Student Evaluations and Research. The UMERC was created to enhance promotion of research activities for medical students and oversee research in the UME. Previously, research proposals had no formal process, and were ad hoc managed by the UME management committee. Here, we describe a mechanism to facilitate research activities in the UME.

Methods: An open access online form was developed inhouse for students and faculty to submit their UME related research or quality assurance/quality improvement/program evaluation project requests (https://cumming.ucalgary.ca/mdprogram/faculty/umeresearch-request). In collaboration with the local research ethics board (REB), all requests must be approved by the UMERC before submission to the REB for full review. Results from the research submission requests were tallied.

Results: Between November 2021 and September 13, 2023, 80 research requests (3 were external to Calgary) were submitted, majority of which were approved. The UMERC have provided formal consultation to 11 unique CSM faculty members and 5 UME students, and connected 9/13 (70%) students who were seeking extracurricular research activities. The UMERC connected three CSM research teams with 7 UME students. Ten UME students are included on 7 internal UMERC projects.

Discussion: Through UMERC, the submission form has streamlined the promotion of and overseeing research activities within the CSM UME. Any scholarly impacts on the UME student body and CSM faculty will be determined in the future.

PME-09 Response Process Validity in Test-Enhanced Learning: Designing MCQs that Align with Clinical Reasoning

Sally Binks, University of Toronto

Background/Purpose: Test-enhanced learning (TEL) using multiple-choice questions (MCQs) is a common instructional strategy used to enhance recall of basic science content. Enhancing TEL to promote preparation for clinical reasoning requires redesigning MCQs to evoke response processes such as "item-specific processing". This study evaluated different MCQ design strategies ("competitive vs non-competitive") and compared processing evoked by each type in learners.

Methods: Nursing and medical students (n=16) participated in a "think-aloud" protocol with either the competitive or non-competitive version of a 19-item MCQ test. Keeping MCQ stems consistent, the "competitive" version had highly plausible distractor options as alternatives to the correct answer, while the "non-competitive" version had less plausible distractors. Sessions were recorded and transcribed and the transcripts inductively coded. Counts were made of response categories compared across the test versions.

Results: Four response categories represented some form of "item-specific" processing and five categories did not. Item-specific processing entails noticing differences among items that are similar and is thought to promote optimal recruitment and organization of knowledge necessary for clinical reasoning. There were significantly more instances of item-specific processing in the competitive than in the non-competitive versions, and significantly more instances of non-item-specific processing (e.g. recognition, guessing) in the non-competitive version than in the competitive version ,x2(df=1,n=16)=11.8, p=0.0008.

Discussion: This work informs evidence-based design of TEL and is a first step toward accruing validity evidence for MCQs to support more complex or challenging learning outcomes.

PME-10 <u>Evaluation and Enhancement of Learning</u> Environment at Postgraduate Training Sites

Noor Rehman, University of Saskatchewan

Background/Purpose: The learning environment (LE) contributes to the success and satisfaction of learners and is linked to several accreditation standards. In this study the overall perceptions, along with individual differences, of the postgraduate medical education (PGME) LE were explored.

Methods: 205 faculty and residents completed an on-line survey. Questions pertaining to the overall work/LE, strengths and challenges, participant demographics, and, for residents only, evaluation of their LE (SPEED survey) were included. Quantitative data was analyzed using SPSS (t-tests, one-way ANOVAs) and qualitative data (strengths/challenges) were coded thematically in NVivo.

Results: Overall, participants gave above average/excellent ratings for welcoming environment (72%), culture of respect (65%), overall work/LE (61%), fair and equitable access to services (58%), and physical environment (55%). Significant differences (ps<.05) were found between training sites (urban vs distributed), role (faculty vs resident) and those with a disability, in terms of how they rated various aspects of the learning environment. The main strengths of the LE included collegiality, education (learning opportunities, teaching quality), environment, and support. Challenges included workload, burnout, service demands, and resources.

Discussion: These results demonstrate both strengths and weaknesses of PGME LE as well as show how various demographic groups perceive the LE differently. Efforts to improve identified areas would have immediate benefits to resident learning and wellbeing.

PME-11 Advancing Equity: An Anti-Racism Infographic Approach to Medical School Admissions

Sahra Kaahiye, University of Alberta

Background/Purpose: In the pursuit of a more equitable and inclusive medical education system, this study developed an online anti-racism infographic for file reviewers responsible for assessing medical school applications. Existing research underscores the importance of anti-racism training in admissions, to ensure fairer outcomes and to deepen understanding of racial disparities. The infographic encourages self-reflection on one's position in the anti-racism journey and provides links for self-improvement, all aimed at ensuring that admissions decisions are free from any form of bias related to applicants' backgrounds or racial identities.

Methods: A mixed-methods study, melding literature review and intervention development, sought guidance from prior research and literature on effective anti-racism pedagogy. The training program draws its structure and guidance from well-established frameworks, such as "How to Be an Antiracist" authored by Ibram Kendi, providing a robust foundation for a practical, guiding tool for application file reviewers.

Results: The educational infographic will be posted on a training website as a valuable tool for file reviewers to learn about anti-racism and take steps toward self-improvement. Additionally, it plays a pivotal role in advancing equitable medical school admissions.

Discussion: The significance of this initiative lies in its potential to promote diversity within medical school cohorts, which in turn leads to improved healthcare outcomes for communities. However, it is important to acknowledge that while anti-racism infographics serve as a means of raising awareness, they must also be complemented by a sincere commitment to anti-racist action. The success of this training is contingent on self-directed learning and the motivation of participants.

PME-12 Navigating Gender-Affirming Care Across Canada: An approach to resource development by the Canadian Queer Medical Student Association (CQMSA)

Nadia Boukina, University of British Columbia, Taylor Morganstein

Background/Purpose: Transgender and gender-diverse individuals experience notable health disparities including barriers to accessing gender-affirming care from a physician. A physician's hesitancy to provide gender-affirming care may result from a lack of transgender health education during medical training or a lack of suitable resources to guide clinical practice. In Canada, there are significant variations between provinces regarding gender-affirming treatment availability, criteria for insurance approval, patient support, and legal processes. To improve access to care and patient safety, the Canadian Queer Medical Student Association (CQMSA) aimed to create province-specific guides to navigating gender-affirming care for physicians and patients alike.

Methods: We first determined the type of data necessary to provide a comprehensive understanding of gender-affirming care, including information on legal transition, hormonal therapy, drug coverage, gender-affirming procedures, criteria for insurance approval, and supportive services. Due to a scarcity of existing resources, we conducted an internet-wide search. Legal and medication-related information was sourced largely from government websites. When possible, information was validated by a community organizer, patient navigator, or government official. Data was collected by Canadian queer medical students before final editing and assembly into a clear, concise resource.

Results: To date, province-specific guides for Quebec, New Brunswick, Saskatchewan, and British Columbia have been published on the CQMSA website and are archived by the Bibliothèque et Archives Nationales du Québec. The remaining provinces are currently in development.

Discussion: Important future steps include dissemination of the guides to physicians, medical trainees, patients, and stakeholders, in addition to collection of feedback regarding the readability and value of the information.

PME-13 <u>Switching tracks: Adapting previously developed</u> professional identities in medical education

Rebekah Sibbald, McMaster University

Background/Purpose: Professional identity formation (PIF) refers to the process through which the medical student is transformed from lay person to physician. However, PIF is consistently studied within a very linear path to medicine — spanning pre-medical training, undergraduate medical training, residency, and ultimately within independent practice. Limited research has studied PIF for students with different matriculation trajectories. This project considers the Theory of Identity Customization (Pratt et al., 2006) to describe PIF for medical students that have developed alternate professional identities prior to joining medical school.

Methods: We conducted semi-structured interviews with McMaster University (Hamilton, Canada) medical students who had non-medical professional experience before entering undergraduate medical training to develop a Qualitative Description (Sandelowski, 2010) of how their previous PIF influenced their current PIF as physicians. Interview transcripts were analyzed by way of an unconstrained deductive approach (Elo & Kyngas, 2008).

Results: Results: Our findings reinforce the Theory of Identity Customization, elucidating the way in which previous professional experience influences both the customization types—enriching, patching, and splinting—and identity sets involved in medical student PIF. These findings highlight how prior professional socialization creates unique PIF pathways for these learners. Discussion: This work promotes a deeper understanding of PIF within these students, highlighting considerations for the academic, clinical, selection, and programmatic supports that will facilitate the success of students with prior professional experience alongside those with more traditional PIF pathways.

PME-14 <u>Black Medical Students In Canada: A Descriptive</u> Analysis

Beraki Abraha, Dalhousie University

Background/Purpose: Although Black medical students are very underrepresented in Canada, there is a dearth of literature exploring their experiences. The last demographic survey to include students across all 17 medical faculties was conducted in 2006. Using data from the Pan-Canadian Demographic Survey we sought to explore the demographic make-up of Black medical students in a disaggregated fashion. This is the first indepth exploration of Canadian medical student demographics to include a large sample of Black students. Our findings provide an opportunity for faculties to evaluate their admissions processes and streams against social accountability mandates. The demographic profile also offers insight to support the creation of relevant and tailored programming for the BMSAC.

Methods: Between April and December 2021, students from 17 faculties completed our survey which was adapted from Dhalla et al., 2002 survey and the 2016 long-form census. Surveys were administered in English and French on the Qualtrics platform. Ethno-racial demographic questions were disaggregated and data for Black self-identified students was extracted and used for this descriptive analysis.

Results: We received 93 survey responses from self-identified Black participants. 63% were born outside Canada and 91% and 9% identified as Anglophone and Francophone respectively. 4%, 60% and 35% identified as non-binary, female and male respectively. Median age was 25 with the majority between 21 and 29 years. The average number of medical school application attempts was 2 with 39% accepted the first time. The top-ranked specialties were Family, Internal, and Emergency Medicine with choices based predominantly on personal skills.

PME-15 Ms

Rukia Swaleh, University of Alberta

Background/Purpose: Black residents and physicians often experience microaggressions over the course of their academic career. In an Ontario based study, 70% expressed having negative experiences due to race. Racial microaggressions are defined as "subtle verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group." Three categories have been defined: microassaults, microinsults, microinvalidations. Black residents face higher rates of attrition due to racial biases and microaggressions. Majority of the data on racial microaggressions among Black residents and physicians is based in the United States with few studies available regarding the experiences of their Canadian counterparts.

Methods: Black Physicians of Canada (BPC) conducted an anonymized survey to assess the experiences of Black residents and physicians regarding microaggressions for quality improvement. The survey was conducted via online platform and included 19 questions on demographics, experiences regarding microaggressions, and resources used to navigate them.

Results: 26 responses were included for analysis. 32% of participants were residents while 62% were practicing physicians. 92% had either witnessed or experienced racial microaggressions in their training or work. Sources of microaggressions were other physicians or residents (92%), patients and families (80%), allied health workers (76%) and support staff (40%).

Discussion: Black residents and physicians in Canada face racial microaggressions at an alarming rate, first described in this study. This has potential negative consequences to both the physicians and patients they treat. Future studies are needed to explore its impact.

PME-16 Assessing Quality of Neurosurgical EPAs as Effective Guidelines for Electronic Mobile Learning

Megan Mak, University Health Network

Background/Purpose: Royal College's most recent evaluation of Competence by Design (CBD) implementation 1 reports that clarity of Entrustable Professional Activities (EPAs) are challenging CBD inclusion in surgical residency programs. This has contributed to some of the CBD implementation challenges and usage as an educational tool. As a case study, a qualitative assessment of the Neurosurgical EPA Guide was undertaken in the translation of EPAs to microlearning modules (MLMs). MLMs are mobile, procedural modules based on EPAs alongside active reinforcement and coaching-in-the-moment. Thus, MLMs are an ideal model to appraise the practicality of EPA transformation into an online format. This project evaluates the effectiveness of EPAs as learning and assessment guides from the perspective of content generation for а mobile-based educational application, providing a better understanding of the utility of CBD for program directors and residents.

Methods: This study worked to create an assessment tool examining Neurosurgical EPAs as guidelines for online course design2 in a microlearning format3. The study also described the method of creating MLMs from EPAs.

Results: We created 7 MLMs from 11 Neurosurgical Foundations EPAs following the Universal Design for Learning guidelines, which were made available to PGY-1 residents. All 11 EPAs were evaluated through the CIPP model of program evaluation and parameters like student-centeredness, structure, and transparency.

Discussion: Ease of interpretation for CBD and EPAs will further improve its implementation into resident education and evaluation. This study determines the available components of EPAs that improve its translatability to mobile learning contexts and addresses the aspects that are lacking.

PME-17 Is there an impact on student performance when clerkship scheduling is shifted to a more distributed model?

Irene Ma, University of Calgary

Background/Purpose: The Cumming School of Medicine changed six out of eight mandatory clerkship rotations from a consecutive-weeks to two non-consecutive blocks model. The drivers of this decision were to provide medical students with more core rotations prior to the CaRMS deadline, allow students to do an external elective rotation, spread out clerkship learning over time, and to allow ease of scheduling. The objective of this study was to examine impacts of this shift on student exam performance.

Methods: Secondary data was collected for students rotating through the consecutive-weeks (classes 2018-2020, n = 3056 students) and the non-consecutive blocks model (classes 2021 -2024, n = 3471 students). Rotation lag (e.g. time spent between completing non-consecutive block of a rotation) and end of rotation exam score were analyzed using SPSS.

Results: Pearson's correlation for rotation lag and exam score demonstrated no significant impact on student performance between the consecutive and nonconsecutive block model for Internal Medicine (IM) or Surgery. Statistically significant (p<0.05) but minimal negative correlations were observed for the Family Medicine (FM, -0.123), Obstetrics/Gynecology (OBGYN, -0.108), Pediatrics (-0.205) and Psychiatry (-0.146) consecutive-weeks model. The rate of failure increased for IM, Pediatrics and Surgery, but decreased in FM and OBGYN in the non-consecutive model.

Discussion: Preliminary results suggest shifting clerkship scheduling has minimal impact on student performance based on rotation lag but may have an effect on the failure rate. COVID-19 restrictions impacted clerkship experiences for the classes of 2021 and 2022. Further analysis will be done to further elucidate these results.

PME-18 Interventions for undergraduate and postgraduate medical learners with academic difficulties:

A BEME systematic review update: BEME Guide No. 56

Julie Montreuil, Université Laval

Background: Clinical teachers often struggle to record trainee underperformance due to lacking evidence-based remediation options. Objectives: To provide updated evidence-based recommendations for addressing academic difficulties among undergraduate and postgraduate medical learners.

Methods: A systematic review searched databases including MEDLINE, CINAHL, EMBASE, ERIC, Education Source and PsycINFO (2016-2021), replicating the original Best Evidence Medical Education 56 review strategy. Original research/innovation reports describing intervention(s) for medical learners with academic difficulties were included. Data extraction used Michie's Behavior Change Techniques (BCT) Taxonomy and program evaluation models from Stufflebeam and Kirkpatrick. Quality appraised used the Mixed Methods Appraisal Tool (MMAT). Authors synthesized extracted evidence by adapting GRADE approach to formulate recommendations.

Results: Eighteen articles met the inclusion criteria, primarily addressing knowledge (66.7%), skills (66.7%), attitudinal problems (50%) and learner's personal challenges (27.8%). Feedback and monitoring was the most frequently employed BCT. Study quality varied (MMAT 0 – 100%). We identified nineteen interventions (UG: n=9, PG: n=12), introducing twelve new thematic content. Newly thematic content addressed contemporary learning challenges such as academic procrastination, and use of technology-enhanced learning resources. Combined with previous interventions, the review offers a total dataset of 121 interventions.

Conclusion: This review offers additional evidence-based interventions for learners with academic difficulties, supporting teaching, learning, faculty development, and research efforts.

PME-19 Ongoing Renewal: Curriculum Mapping in the Population Health Course

Barbara Borges, University of Manitoba

Background/Purpose: The UGME Population Health course is a dynamic curriculum that requires ongoing renewal. The importance of doctors dealing with emerging topics in society makes it precedent to contemplate and reassess the way we build our medical education curriculum. There are many resources to consider when planning this curriculum, including the CACMS accreditation standards, the Medical Council of Canada (MCC) Examination Objectives, and medical education conference presentations/conversations. Due to the evolving nature of the medical field and societal needs, we undertook a curriculum mapping exercise to inform the creation of new sessions in the Population Health Course.

Methods: The examined Population Health course was developed in 2014 using the 2013 MCC objectives as a guiding document. For this initiative, in collaboration with course directors, the coordinator mapped the Population Health curriculum to the 2022 MCC objectives to identify areas of alignment and curricular gaps.

Results: With the results, we developed targeted sessions to address gaps we found, including the redistribution of some curriculum hours to accommodate 10 new sessions, such as One Health, Climate Change, Introduction to Public Health Practice, and Public Health Ethics.

Discussion: This mapping exercise strengthens the curriculum as it ensures the alignment of our course with national and international recommendations and standards. Moreover, our approach to renewing the medical education curriculum can foster the improvement of future doctors who are being provided with skills and awareness that could help address health needs in the future.

PME-20 It's All About the Joy: Perspectives on Practicing and Teaching Family Medicine Obstetrics

Sabrina Kolker, University of Toronto

Background/Purpose: To explore perspectives of family physicians (FP) who provide family medicine obstetrical care (FM-OB) to inform retention and recruitment of FM-OB practitioners and stimulate current FPs to reflect on what brings them joy in their work.

Methods: Clinician teachers from three urban multidisciplinary Canadian academic family medicine centres were invited to participate. They completed a demographic survey and 30-60 minute semi-structured interviews. Interviews were analyzed using a constant comparison method of descriptive thematic analysis. Interviews probed experiences and perceptions about learning, providing, and teaching FM-OB care.

Results: There were 10 participants. Three main themes explained why participants chose to start practicing FM-OB and/or continued to practice FM-OB: 1. Individual influences; 2) Relational influences; 3) Systemic influences. Participants described how receiving personalized positive feedback, developing hands-on skills and interacting with positive role models early on in their training influenced them to practice FM-OB. The joy derived from FM-OB practice, working with learners, establishing longitudinal patient relationships and working in a system with a collegial team environment, strong leadership and a supportive call model, influenced them to continue practicing FM-OB.

Discussion: As the number of FM-OB providers continues to decline and fewer learners choose to practice family medicine, learning from those who enjoy the practice is important to promote recruitment and retention. This study found experiences of joy in this work was key to participants' continued engagement in FM-OB teaching and practice. Findings contribute to understanding how to better ensure FM-OB retention and how we may inspire learners to choose family medicine as a career.

PME-21 It's practice that counts: reflections and lessons learned about residents-as-teachers

Heather Zimcik, University of Toronto

Background/Purpose: Resident teachers play an important role in medical education, and resident teacher training programs are common. Developed in 2001, the Department of Family and Community Medicine at the University of Toronto's Teaching Residents to Teach Program (TRT) is one of Canada's longest-running resident-as-teacher training programs. Given significant changes in national curricular design over time and the evolving role of resident teachers in undergraduate medical education, we undertook a critical review of the TRT to help inform future iterations and innovations.

Methods: A multi-pronged approach of TRT program evaluation included: an analysis of 20 years of student evaluations; a literature review to examine current best practices; a thematic analysis of resident written reflections; and a survey of recent graduates to better understand the current resident experience.

Results: Evidence of highly positive evaluations over 20 years confirmed ongoing resident satisfaction with content and format. Resident reflections focused on the enduring value of regular engagement in teaching experiences in a wide range of teaching settings. Identified barriers to enhancing teaching opportunities included disparity among sites in a distributed curriculum, competing resident priorities, and a need for improved processes to connect residents with available opportunities.

Discussion: The results of this evaluation process helped guide the design and delivery of a modified program throughout the COVID-19 pandemic. Shorter modules with more focused content was aligned with current literature and was as highly evaluated as our historical program. The results also highlight the importance of enhancing teaching modules with ample opportunities for teaching practice.

PME-22 <u>Performing Under Pressure: What Can ER</u> Residents Learn from Elite Athletes?

Gabrielle Trepanier, Université de Sherbrooke

Background/Purpose: Coping with stress and pressure is an inherent part of emergency medicine but it is not a skill routinely taught in residency programs. This study aims to identify specific psychological competencies in elite-level athletes that can be used in the design of a curriculum to support emergency medicine resident performance in high acuity settings.

Methods: We conducted a scoping review of the last 20 years to identify the relevant psychological competencies used by top elite athletes (Olympic or World level) to perform under pressure. We used controlled vocabulary and searched across Medline, PsycInfo and SportDiscuss. A standardized charting method was used by the team of four authors to extract relevant data.

Results: The scoping review identified 18 relevant articles with a majority of quantitative methods (7/9). 679 athletes were included from 49 different sports and 11 number of countries. 71 citations were extracted and regrouped under 6 main themes. The main psychological competencies included the ability to sustain a high degree of motivation and confidence, to successfully regulate thoughts, emotions and arousal levels, and to maintain resilience in the face of adversity. We used the main psychological competencies identified from our scoping review to develop a model to guide the integration of performance psychology principles into future EM residency programs. Our goal is to better prepare residents with tools to affront day-to-day challenges in an emergency room, prevent burnout and improve quality of care in high stress circumstances.

PME-23 <u>The Canadian Medical Biochemistry Residency</u> Training Program: History and Current Challenges

Li Wang, University of British Columbia

The Canadian Medical Biochemistry Residency Training Program: History and Current Challenges

Background/Purpose: Medical Biochemistry (MB), a vital branch of medicine focusing on biochemistry and metabolism related to human health and disease, has been recognized by the Royal College of Physicians and Surgeons of Canada (RCPSC) since the 1960s. However, a decline in practicing medical biochemists is evident due to difficulties recruiting residents and increasing retirements. To address these issues, we reviewed the history of MB and its residency training in Canada.

Methods: We obtained a historical perspective of MB by interviewing active and emeritus medical biochemists. Data from the RCPSC was obtained, including the number of residents recruited annually and those taking royal college exams in MB.

Results: MB resident recruitment accredited by the RCPSC started in 1965. Initially, residency training was four years, and was extended to five years in 1985, incorporating one year of basic clinical training. Between 2005 and 2012, there were on average 5 MB graduates across Canada annually. From 2012 to 2022, MB transitioned from primary entry to a subspecialty of Internal Medicine/Pediatrics with an average of 2 MB graduates.

Discussion: Transitioning from primary entry to subspecialty training has posed significant challenges in recruiting MB residents. The implications of this shortage may affect laboratory medicine practice and national healthcare services. International status has been impacted as many comparable countries have MB as primary speciality. Addressing these challenges is crucial to ensure the continued excellence of this specialty in Canada.

PME-24 Activities of the School of Patient Partnership

Vanessa Balounaick-Arowas, Center of Excellence on partnership with patients and the public

Background/Purpose: In 2016, the inception of the Center of Excellence on Partnership with Patients and the Public (CEPPP) marked a pivotal moment in the pursuit of transforming patient and public engagement into an integrated, scientific, and cultural cornerstone. CEPPP's overarching goal is to redefine healthcare practices, emphasizing patient partnership, as a scientific, cultural, and practical norm that enhances the health of all and enriches individual healthcare experiences. Within the broader spectrum of CEPPP's initiatives, we focus our attention on the activities conducted by the School of Partnership.

Methods: The School of Patient Partnership, is dedicated to realizing the organization's vision. Its mission is to develop and deliver a wide range of training programs, accessible to diverse audiences in Quebec, Canada, and internationally. Furthermore, the school aims to engage decision-makers at various levels of the healthcare ecosystem. The escalating demand for active patient partnership within healthcare drives the School of Patient Partnership to continually innovate, generating fresh concepts, seizing new opportunities, and delivering impactful outcomes.

Results: This abstract presents a comprehensive review of training programs conducted between 2021 and 2023, accompanied by concise descriptions of each program. We also share the challenges encountered during this process.

Discussion: Our discussion revolves around the insights gained while designing and delivering patient partnership training programs. Additionally, we shed light on the enduring challenges that will shape our future endeavors, as we strive to reinforce the ideals of the School of Patient Partnership and uphold the overarching mission of CEPPP

PME-25 Online mentoring as a strategy to increase rural student interest in health professions education programs

Juliet Oshiro, University of British Columbia

Background/Purpose: Outreach strategies that recruit rural students into health professions education programs can help address shortages of rural healthcare professionals. However, geographical isolation often hinders the sustainable delivery of post-secondary outreach efforts in rural communities. To address these barriers, we developed an online mentoring program, Rural eMentoring BC, where students in health professions programs mentored rural youth, and explored its impact on rural youths' career and educational goals.

Methods: Relational theories conceptualizing mentoring relationships as a key mechanism for growth and empowerment drove the development of the program's semi-structured curriculum, which included topics like educational pathway exploration, post-secondary applications, and rural-urban transitions. Mentees voluntarily completed pre- and post-surveys with a mixture of quantitative and short answer questions which we analyzed using McNemar and Wilcoxon statistical tests and thematic analysis, respectively.

Results: Results: After participating in the program, significantly more mentees were interested in healthcare careers, however, their attitudes towards post-secondary education and practicing rurally remained constant, as they already viewed these areas positively. Mentees reported valuing the opportunity to learn from a mentor, gain post-secondary and career support and information, and learn life skills. Conclusions: This study suggests that online mentoring can inspire and equip rural youth to pursue healthcare professions programs. By overcoming barriers to sustainable program delivery in rural communities, this strategy shows promise for recruiting rural students to health professions programs, like medicine, though future studies should determine its long-term effects on rural student representation in these programs, and ultimately on the number of rural healthcare professionals.

PME-26 UBC MDUP Physical Activity Curriculum Review

Stephanie McCann, University of British Columbia Background/Purpose: While exercise has long been established as an integral part of treatment for chronic diseases, many physicians feel unprepared to adequately prescribe exercise to their patients. As this issue likely stems from inadequate education during undergraduate training years, this review aims to explore the current quality of physical activity curriculum at UBC.

Methods: A comprehensive scan of the 2021-2022 curriculum was completed using exercise-specific search terms on Entrada, UBC's learning management system. This data was assessed for total time dedicated to exercise education, as well as existing gaps in the curriculum in relation to two recent guidelines published by the American Medical Society for Sports Medicine and the Canadian Academy of Sport and Exercise Medicine.

Results: The UBC UGME curriculum has 4.8 dedicated hours to exercise teachings, 24 sessions where learning objectives are assigned to exercise (albeit without a specific time domain) and 22 instances where an exercise-adjacent term was part of the curriculum delivery (again without a specific time domain). UBC appears to be a leader in exercise education for medical students.

Discussion: There are several findings from this analysis that warrant further discussion. We recommend that UBC commits to updating the exercise teaching best practices to include the 24-hour movement guidelines. Also, we see an opportunity for UBC to assign specific time domains for exercise related topics in sessions where exercise isn't the sole focus. Lastly, closer alignment between the two recent exercise education publications and UBC's curriculum can be established.

PME-27 A Complete Refresh of a Pre-Clerkship Question Bank

Mike Paget, University of Calgary

Background/Purpose: The restructured pre-clerkship program at the Cumming School of Medicine (CSM), known as Re-Imaging Medical Education (RIME), changed the sequence of clinical presentation teaching in the pre-clerkship. This shift led to the creation of a new question bank to reflect the needs of the new curriculum.

Methods: Preclerkship educators were hired to develop new content, with each faculty member responsible for a variety of clinical presentations. Once the curriculum was appropriately sequenced and spirality of each topic mapped out, content creation of replayable question templates followed. Podcasts, guides, and workshops were given to teach faculty how to create replayable content. This content was created in CARDS (https://cards.ucalgary.ca) for delivery to the students. In addition to playing cards to learn the content, students were tested on three mandatory decks of cards, and a traditional invigilated paper exam generated from question templates at the end of the first 6 week Unit.

Results: A total of 945 question templates from 26 faculty across 48 topics were created for Unit 1. These templates utilized over 600 values that contained preset ranges and texts, which were randomly allocated when cards were played. The class of 2026 played 229101 Unit 1 cards. The average number of cards played was 1280, with a standard deviation of 744.

Discussion: Faculty were able to rapidly develop question templates covering a wide variety of topics, with a high level of uptake from the student population. Ongoing work to enhance the complexity and replayability will continue through the development of the spiral curriculum

PME-28 Anti-Black Racism and Black Health Competencies for Health Professional Education: a modified Delphi consensus process.

Clemence Ongolo Zogo, University of Toronto

Background/Purpose: Pervasive structural anti-Black racism accounts for disparities in health outcomes in Canada and reforms in health professional education are required to tackle this problem. The Black Health Education Collaborative (BHEC) supports such reforms by developing resources such as situational assessments, educational modules and a competency set on anti-Black racism and Black health.

Methods: The three-phase competency project started in January 2022 with a literature review to map out curricula on anti-Black racism and Black health globally. In phase 2, competency statements extracted from the review were subject to thematic analysis. Common themes informed the first draft of the competency set which was distributed to a panel of experts via anonymous surveys in phase 3. The Delphi technique was used to elicit expert opinions and subsequently validate the competency set. Agreement was assessed using a 6-point Likert scale with consensus set at 80%. Open-ended questions were used to gather additional feedback for each statement. Recruitment of panel members aimed for maximum representation in health discipline, location, and years of experience. We used a model of engagement and participation in which African, Caribbean, and Black experts informed all aspects of our project. Preparations for a third consensus survey are currently underway to finalize the competency set.

Results: Two rounds of consensus survey with response rates ranging between 41 and 50% yielded 8 core competency themes and 42 objectives.

Discussion: The competency set can be tailored to specific disciplines to support the development of an anti-racist healthcare workforce in Canada.

PME-29 The Empathy Project: An interprofessional, experiential learning activity for undergraduate medical students

Christine Mathew, University of Ottawa

Background/Purpose: As part of their accountability mandate, the University of Ottawa Faculty of Medicine (FoM) is collaborating with the Alliance to End Homelessness Ottawa (ATEHO) to facilitate an interprofessional experiential learning activity. Session objectives are to: 1) understand the evolving social contract between health professionals and society; 2) discuss the public's expectations and hopes for graduating health professionals; and 3) reflect on the health professional's role in being responsive to changing societal needs. The activity has been co-designed by ATEHO and people with lived experience. Our study will evaluate the experience, learning and anticipated integration into future education and practice of participating students.

Methods: We will host two half-day workshops in September 2023. The workshop is compulsory for all first-year medical students, and voluntary for students from the Faculties of Health Science and Law. Facilitated by ATEHO staff and people with lived experience, participants will experience a simulated 'day-in-the-life' of someone seeking to resolve core needs such as housing, employment, legal-aid, food, and income support, with an emphasis on relational empathy and solution-oriented dialogue. All participants will receive a post-session questionnaire to assess their experience, learning, and anticipated behavior.

Results: We anticipate approximately 230 students (180 from FoM and 50 from other faculties). We will present the outcomes of our evaluation and lessons learned from this new community-campus partnership.

Discussion: Our results will inform the design and delivery of future workshops, highlight opportunities to strengthen community involvement in student learning, and demonstrate the potential value of such partnerships for other medical schools.

PME-30 <u>Targeting core eco-responsibility principles to</u> integrate into medical and health sciences curricula

Veronique Foley, Université de Sherbrooke

Background/Purpose: In the context of global climate change, healthcare professionals are facing the paradox of their responsibility and their contribution to greenhouse gas emissions. Given this evidence, Health education programs want to integrate an eco-responsible lens to their curricula. However, the key principles of eco-responsibility for healthcare professionals, and the way to integrate them in their training, remain poorly documented in the literature. Therefore, the goal of this project is to determine and validate core principles of eco-responsibility for healthcare professionals and to identify facilitators and obstacles to their integration in the curricula.

Methods: This study follows a qualitative descriptive interpretive approach. A critical literature review was performed, and a layered analysis was conducted to identify core principles. Eight semi-directed interviews with medical and rehabilitation professors and two focus groups with experts in the fields of pedagogy and ecoresponsibility were conducted, and a thematic analysis was used to iteratively validate the principles and identify barriers and facilitators.

Results: Ten key eco-responsibility principles emerged from the critical review. Several obstacles and facilitators to the integration of these principles into the curricula were identified. Lack of time or resources, loaded curriculum, and fear of change were frequently mentioned hindrances, but examples, schematization, and pointing out the interest of both the faculty and students were considered helpful.

Discussion: This study highlights the significance of ecoresponsibility in healthcare education programs. The ten essential eco-responsibility principles identified in this research aim to shape environmentally conscious professionals committed to integrate and promote planetary and sustainable health in their practice.

PME-31 Patient Perceptions of In-Hospital Laboratory
Blood Testing: A Patient-Oriented and Patient CoDesigned Qualitative Study

Dr Adnan Adil Mithwani, University of Calgary

Background/Purpose: Indiscriminate use of laboratory blood testing in hospitals contributes to patient discomfort and healthcare waste. Patient engagement in low-value healthcare can help reduce overuse. Understanding patient experience is necessary to identify opportunities to improve patient engagement with inhospital laboratory testing. Objectives: To understand patient experience with the process of in-hospital laboratory blood testing.

Methods: We used a qualitative study design via semistructured interviews conducted online or over the phone. Participants were adult patients or family/caregivers (≥ 18 years of age) with a recent (within 12 months of interview) experience of hospitalization in Alberta or British Columbia, Canada. We identified participants through convenience sampling and conducted interviews between May 2021 and June 2022. We analyzed transcripts using thematic content analysis. Recruitment was continued until thematic saturation was reached.

Results: We interviewed sixteen participants (thirteen patients, one family member, and two caregivers). We identified four themes from patients' experiences of inhospital laboratory blood testing: (i) patients need information from healthcare teams about expected blood testing processes, (ii) blood draw processes should consider patient comfort and preferences, (iii) patients want information from their healthcare teams about the rationale and frequency of blood testing, (iv) patients need information on how their testing results affect their medical care.

Learning Objective(s) Current laboratory testing processes in hospitals do not facilitate shared decision-making and patient engagement. Patient engagement with laboratory testing in hospitals requires an empathetic healthcare team that provides clear communication regarding testing procedures, rationale, and results, while considering patient preferences and offering opportunities for involvement.

PME-32 <u>Additional Clinical-Based Fellowship for</u> Radiologists

Aren Mnatzakanian, University of Toronto

Background/Purpose: Throughout their training, radiology residents acquire a diverse skill set and undergo a broad educational experience, including a general internship year involving the direct management of patients. The residents' extensive training serves as an opportunity to expand the Radiology scope of practice through clinical-based fellowships, which would allow radiologists to work with patients directly in a clinical setting.

Methods: Using the Canadian Family Medicine Enhanced Skills Program as a model, we conducted a Canada-wide survey of radiology residents to assess interest in additional fellowship training to expand their scope of practice.

Results: Survey results indicated that a majority of radiology residents (69.2%) would be interested in seeing patients in clinic, and 54.2% indicated >50% interest in undergoing an additional year of clinical fellowship to enhance their skill set. Residents would choose to dedicate a mean of 23.8% (+/- 14.8%) of their work hours to clinic. The most popular choices for clinical fellowships were sports medicine (22.8%), emergency medicine (19.6%), and vascular medicine (18.5%). In addition, a majority (52.9%) of residents felt capable of offering incidentaloma clinics without additional training beyond their core radiology residency.

Discussion: Nearly 70% of surveyed radiology residents would be interested in seeing patients in clinic as a component of their overall practice. The most popular clinical fellowships were sports medicine, emergency medicine, and vascular medicine. Ultimately, radiology trainees gain a diverse educational experience throughout the course of their residency, and expansion of training options with clinical-focused fellowships will likely prove popular among current residents.

PME-33 <u>Development of Microlearning Modules to</u> <u>Support Surgical Residents' Transition to Competence by</u> <u>Design</u>

Zoe McManus, University of Toronto

Background/Purpose: Adoption of Competence by Design (CBD) has been met by challenges frequently cited by residents. These include additional burden of work, a sense of being under scrutiny, and worries about comparison to others. These challenges are a direct reflection of the difficulty in transitioning from didactic learning approaches to coaching-based learning. Currently, there is a paucity of educational resources available to residents designed to complement CBD. This lack of resources presents a barrier to CBD implementation and exacerbates the stress experienced by residents during this professional transition. We have developed microlearning modules (MLMs) to complement CBD and support the transition to coaching-based learning. Our modules integrate didactic teaching methods with coaching-inspired elements such as selfreflection prompts, Al-driven quiz questions, and intraoperative videos. Evaluation of MLMs is needed to determine their efficacy and acceptability to residents and to optimize their structure and content.

Methods: Beginning August 2023, all University of Toronto surgical residents were offered the opportunity to register for the MLM-delivery app ELMspace. Data collection will include number of users, user engagement scores, duration of enrollment, and resident feedback

Results: Currently, there are 57 ELMspace users, and 24 MLMs are available covering 19 entrustable professional activities across 5 surgical specialties. Collection of resident feedback is ongoing.

Discussion: The development of appropriate educational resources is essential for the implementation of CBD and its acceptance by learners and faculty. The feedback we collect will inform the development of MLMs that will support residents' transition to CBD and coaching-based education.

PME-34 <u>Use of Simulation in a Psychiatry Training Program</u> to Develop Mental Health Law Competencies

Ben Mccutchen, McMaster University

Background/Purpose: When a patient contests an incapacity finding or involuntary hospitalization status, the onus is on the physician to prove that the corresponding legal thresholds have been met. The quasijudicial and non-clinical nature of Review Board Hearings makes it difficult for some residents to develop these mental health law competencies on clinical rotations.

Methods: To address this problem, we used a simulated Review Board Hearing for PGY 2-4 psychiatry residents in our academic half day curriculum. Residents selected a pre-determined role (psychiatrist, patient's lawyer, panel member) and participated in a simulated hearing. To evaluate effectiveness, residents were surveyed before and after the simulation about their confidence in assessing for capacity to consent to treatment and involuntary status, and their confidence participating in the Review Board Hearing when their findings are contested. Pre- and post-questionnaire Likert scale responses were compared using Mann-Whitney U non-parametric tests.

Results: Nineteen residents participated in the prequestionnaire and 15 in the post-questionnaire. Statistically significant differences in confidence were observed in the following domains: i) conducting an assessment to determine capacity to consent to treatment (p = .04), ii) describing the legal branches of the capacity test to a patient or their family (p = .03), and iii) participating in a hearing to have a patient's incapacity finding (p < .001) or involuntary status (p = .02) reviewed. No significant differences were found in residents' confidence describing and assessing for involuntary status.

Discussion: Simulation is a potentially valuable tool to support residents in the development of mental health law competencies.

PME-35 <u>Pediatric residents' assessment of their postgraduate training on the social and structural determinants of obesity</u>

Renee Lurie, University of British Columbia

Background/Purpose: Childhood obesity is a serious health condition with lifelong sequelae. Its prevention and management are strongly linked to social and structural factors. Pediatricians require specialized knowledge and skills to navigate the complexities of this chronic condition. Despite its importance, there is limited literature on the Canadian pediatric postgraduate obesity curriculum. This study explored the formal, informal and hidden aspects of the obesity curriculum, in a pediatric residency program, to examine trainee perceptions of their readiness to address childhood obesity.

Methods: We conducted semi-structured individual and group interviews with current pediatric residents at one institution. We analyzed interview transcripts iteratively, with common themes identified.

Results: There was a lack of exposure to the social and structural factors contributing to obesity in formal and informal curriculum. Many felt helpless when approaching obesity, leading to avoidance in clinical encounters. There was a narrow focus on weight, and a worry of the stigma surrounding obesity when counselling patients. Residents felt more multidisciplinary training was needed on how to address and manage the psychosocial, cultural and structural factors contributing to childhood obesity.

Discussion: Our findings identify the gaps in the current pediatric postgraduate obesity curriculum at one institution, and will start helping guide the discussion around the development of a more standardized, holistic curricula that addresses social and structural factors contributing to obesity. This will ensure that residents and subsequently, practicing pediatricians, feel more prepared to address the prevention and management of obesity. Further research is required to assess this on a broader, multi-program level.

PME-36 Gaps and Future Directions in Resident Learning Resources on Canadian Postgraduate Medical Education Websites.

Erin Weir, University of Calgary

Background/Purpose: The University of Calgary is undergoing a Postgraduate Medical Education (PGME) website redesign to provide easy to find and relevant resources for faculty and residents. The purpose of this study was to determine what, if any, medical education relevant learning resources were present on Canadian PGME websites at other institutions.

Methods: A review was completed of publicly accessible materials on the PGME websites for 13 English-language Canadian medical schools. Manual content analysis was conducted by EW for learning resources related to study skills, time management, procrastination, prioritization, and goal setting. Attention was paid to whether resources provided were designed by PGME staff/faculty or were linked to other sources, including institutional student success centres, other institutions, or journal articles.

Results: 5 of the 13 institutions (38%) provided links to learning skills resources on either their main PGME or wellness support websites. The majority (70%) of these links were to resources created by the institution's success centre or American medical schools. Only 1 institution (8%) provided practical resources and tips that appeared to be created in-house with the medical learner in mind. In 2 cases (15%), some links were password-locked so it was not possible to verify the content or origin of resources. Content may be inside inaccessible institutional learning management systems.

Discussion: This content review demonstrates that Canadian PGME learners lack open access on PGME websites to learning skills resources that are built with their context in mind. Further study will be required to determine high value topics for resource development.

PME-37 CBME for Ultrasound, standardizing scanning skills, learning imaging anatomy for interpretation and diagnosis.

Mousumi Bhaduri, Western University

Background/Purpose: Ultrasound is a dynamic imaging modality with high operator dependence. Radiologists must know how to acquire images in order to trouble shoot or perform image guided procedures. The training of ultrasound is mostly interpretation based and rarely of image acquisition with no standardized curriculum for learning both. Radiology has begun its transition into the CBME based learning and having a standardized curriculum would fit into the skill-based assessment of CBME.

Methods: The curriculum was based on the guidelines provided by the Royal College of Canada, American College of Radiology, and the Society of Radiologists in Ultrasound. A month-long rotation was designed with 3 weeks of hands-on scanning and the 4th week was for dedicated supervised interpretation. A list of pathologies was compiled. The organs to be scanned were assigned per week. Sonographers evaluated residents on their scanning technique each day. The resident evaluated the curriculum at the end of rotation.

Results: Sonographer evaluation showed that residents consistently improved their scanning technique through the course of the rotation. The residents reported increased confidence in their abilities to perform US-guided procedures on other rotations (such as Interventional and Breast Imaging).

Discussion: As the residents felt that simultaneously learning both image interpretation and scanning greatly increased their diagnostic abilities, we have also tried a similar curriculum for Obstetric imaging and incorporated it into the Ultrasound curriculum.

PME-38 <u>Using large language models to automate</u> <u>literature screening in undergraduate medical program</u> evaluation.

Irene Ma, University of Calgary

Background/Purpose: The Cumming School of Medicine (CSM)'s recently restructured pre-clerkship program, called Re-Imaging Medical Education (RIME), provided an opportunity to revamp end of course surveys (EOCS). A literature search to determine best practices of redesigning EOCS resulted in 6443 articles. A large language model (LLM) was utilized and validated to automate the paper screening process.

Methods: Four academic databases were searched for English articles between 1968 to August 17, 2023. To validate the LLM with human reviewers, inclusion criteria for literature review were narrowed down to any study that described the design/creation/evaluation/modification of EOCS where students provided feedback on the educational unit. All publicly available titles and abstracts were screened using a Python-based novel workflow using OpenAI's GPT application programming interface with the screening criteria included. GPT was also prompted to provide a reasoning for its decisions. Two individuals (screened in Covidence, with an additional person for consensus) and two GPT models (GPT 3.5 Turbo and GPT4) were reviewers.

Results: The literature search strategy resulted in the inclusion of 96 titles and abstracts (55 duplicates were removed). The GPT4 model outperformed GPT3.5 Turbo, and had an accuracy of 81.2%, a sensitivity of included papers of 77.8%, and a sensitivity of excluded papers of 81.6%. The inter-rater reliability between human reviewers and GPT4 was fair (Cohen's kappa = 0.350, p<0.001).

Discussion: The GPT4 model has the potential to streamline the literature review process in medical education. Studies have shown that it may be better suited to review other fields of research.

PME-39 <u>University of Saskatchewan Medical Student</u> Career Choice Decisions

Mohammed Armanazi, University of Saskatchewan Background/Purpose: Medical student career choice is a widely discussed subject in the Canadian undergraduate medical curriculum. Addressing this topic requires robust education and guidance to inform both medical learners' career decisions and recommendations for educational leaders. Declining matches of medical students to family medicine (FM) residencies through the Canadian Residency Matching Service (CaRMS) and challenges in recruiting students to FM residencies in Saskatchewan highlight the need for a comprehensive understanding of the factors influencing career choices.

Methods: A literature review was completed using OVID Medline, Embase databases, and Google Scholar on factors impacting Canadian medical learners' career choices and location preferences. Focus groups with medical students and family medicine residents in Saskatchewan were conducted via video conference. Thematic analysis of the transcribed records of these interviews were analyzed for common and unique themes, which were categorized as sub-themes of the identified themes of the literature review.

Results: The literature review included following major themes on medical student career choice decision factors: demographic and medical school characteristics, exposure, mentors, medical practice values, lifestyle and financial expectations/needs, and societal orientation/prestige. Location preference factors included demographics, personal/professional development, attitude, lifestyle/financial needs and expectations.

Discussion: In the literature review relevant to Saskatchewan, demographic profile and personal and professional development were found to be significant predictors of location preference, including urban and rural training/practice.

PME-40 The Mentored Team Digital Innovation and Research Grant – A Novel Approach

William McCauley, Western University

Background/Purpose: Building faculty capacity to engage meaningfully in medical education research requires targeted support. Funding is a necessary but insufficient part of that support. The Schulich School of Medicine & Dentistry's CPD Office has offered an innovation and research grant for several years, but uptake has been low, and research output limited. In this innovation, we reimagine how primarily early career faculty could be supported for success in medical education research.

Methods: Through literature review and discussion with experts at our Centre for Education Research and Innovation (CERI), we identified mentorship as a critical element for early career success.

Results: We developed a revised grant competition with two overall goals: to encourage early career faculty to be involved in medical education research and to foster collaboration among faculty members. Rather than applying for a grant with a research project already developed, the application is for early career faculty to apply to become part of a team of up to six faculty who will work together to develop and complete a research project. The team will be mentored by a faculty member with expertise in medical education research. The grant will provide funding for the project to be completed within 3 years of the award. The inaugural competition was launched in October 2023, with a submission deadline of March 1, 2024. The impact of the two goals of the grant will be evaluated over time, looking at both traditional measures of success (publications, presentations, products) and also at participant learning and development.

PME-41 <u>Building the Foundations: A Faculty Development</u> Framework for All

William McCauley, Western University

Background/Purpose: The Schulich School of Medicine & Dentistry (SSMD) recently launched a Faculty Development (FD) program to provide faculty with advanced education competencies. Recognizing that this program was of interest to a select group of faculty, the CPD office constructed a FD framework that includes elements that support and engage all faculty, including medicine, dentistry and basic medical sciences.

Methods: To develop the framework, data was gathered from an environmental scan, peer-reviewed literature, focus groups with relevant committees, needs assessments, and individual interviews.

Results: The framework is based on the academic roles of all faculty at SSMD and includes topics on teaching, research, leadership and administration, and the culture of academia. For each of these areas, topics are offered at escalating levels of understanding, building from Foundations, into Innovation and Transformation levels. Rather than the traditional workshop, Foundation level education will focus on short, asynchronous educational offerings aimed at early career faculty. The Innovation and Transformation levels will be more in-depth explorations of topics for those interested in pursuing those areas as part of their academic careers. The Framework has been approved by relevant committees and content is being developed for the foundation level modules. The construction of the full framework components will be ongoing through 2026. An evaluation strategy is being developed to assess satisfaction, utilization, and impact.

PME-42 Evaluating the Role of Surgical Clerkship
Procedural Skills Day in the Development of Clinical
Competence in Medical Students

Mirna Matta, University of Calgary

Background/Purpose: The challenge of balancing medical student education with the care of acutely ill patients is an ongoing issue with inpatient surgical services. Therefore, recent studies have shown that over 60% of medical students report lacking competence in performing simple procedural skills. To address this, a project was conducted to evaluate the impact of transforming Academic Half Days (AHDs) from didactic lectures to procedural skills sessions on clinical clerk's self-perceived competence during surgery clerkship rotations.

Methods: During their general surgery rotation, clinical clerks participated in a procedural AHD session. This session included a post-operative complication simulation with a standardized patient, a suturing skills station, and NG and drain insertion stations, all supervised by surgical staff or residents. To assess self-perceived competence, a survey was administered, utilizing a 4-point Likert Scale for each rotation objective, considering students' comfort levels with the procedures.

Results: The initial survey included 11 out of 12 medical students, with ongoing recruitment. Noteworthy findings indicate high competency in early recognition and management of post-operative complications (90.9% somewhat competent) and NG tube insertion technique (81.8% somewhat competent). Suturing proficiency and recognizing complications exhibited moderate competency (63.6% somewhat competent and 54.5% competent, respectively). Drains station objectives had lower competency levels (27.3% somewhat competent).

Discussion: These results underscore the importance of AHDs in enhancing medical student preparation by merging theoretical knowledge with practical experience in a controlled, safe environment. This approach benefits both undergraduate medical education and patient care, highlighting areas where further training and improvement may be needed in medical education.

PME-43 The development of an electronic medical record gender-affirming tool bar for the provision of educational resources and supports for primary care providers and learners who care for transgender and gender diverse patients

Thea Weisdorf, University of Toronto

Background/Purpose: St. Michael's Hospital Academic Family Health Team (SMHAFHT) provides care to over 1500 transgender and gender diverse (TGD) patients. Many of our family physicians, family practice residents and nurse practitioners have a small number of TGD patients whereas there are only a few clinicians who have expertise in TGD care. The gender-affirming tool bar (GATB) was created to provide resources and improve care for our TGD patients and enhance the educational experience of our health professional learners.

Methods: The collaborators of the GATB met regularly to develop the general categories and subcategories. Resources were compiled and sent to LM to be uploaded to the GATB. Materials were collected based on common requests for usage including: guidelines, cancer screening, hormone therapies (masculinizing/feminizing), surgical letter templates, clinical resources, clinic visit templates and general resources

Results: The GATB has been activated for approximately 780 SMHAFHT patients tagged with the gender-affirming ICD-9 code. Many resources have been instrumental in ensuring our patients have the best information and support in a timely and sensitive manner. Patients and their families find handouts related to surgeries and community resources particularly helpful. All primary care providers and learners have reported finding these resources essential in improving the care they provide.

PME-44 <u>Collecting validity evidence for two simulation-based assessments of lifelong learning in bedside</u> thoracentesis skills

Flora Jung, University of Toronto

Background/Purpose: "Preparation for future learning" (PFL) requires trainees to use resources to solve novel problems in clinical practice. We constructed two assessments of lifelong learning to collect, rigorously analyze, and evaluate whether and how validity evidence supported their use in medical education.

Methods: We selected thoracentesis as a procedural skill with clear knowledge and skill outcomes, conducive to developing novel PFL-assessments. We consulted nine experienced physicians to develop performance dimensions for two different PFL-assessments. We collected validity evidence according to Kane's validation framework, to appraise our claims with the scoring, generalization, extrapolation, and implications inferences.

Results: To support our scoring and generalization inferences, our processes produced a 46-dimension performance blueprint, which was used to develop a seven-case 'embedded resource' oral exam PFL-assessment and scoring rubric, and a 5-case 'learn-then-perform simulation-based PFL-assessment. Four assessors scored six medical students to produce response process evidence on the utility of the case stimuli and scoring rubrics (ICC=0.51). Our initial analysis yielded several themes to refine the cases and their rubrics, and to improve raters training. Assessors produced think-aloud data, detailing how they perceived the cases would extrapolate to lifelong learning in clinical practice, and their potential use as formative assessments in Respirology curricula.

Discussion: We used Kane's validation framework to develop and test two novel PFL-assessments aimed at assessing lifelong learning. Ours is the first systematic evaluation of the evidence supporting PFL-assessments in the research setting. Future studies are needed to establish evidence supporting PFL-assessments in formative settings for medical trainees.

PME-45 Pan Canadian Scan of Social Medicine Curricula in Undergraduate Medical Education

Rachel Fagen, University of Ottawa

Background/Purpose: Social medicine (SM) concepts including public and population health are integral to undergraduate medical education (UGME). Although important, University of Ottawa students express dissatisfaction with current teaching methods. The lack of literature on effective SM instruction in Canadian medical schools motivated this study, which aimed to explore innovative pedagogical approaches.

Methods: We contacted SM faculty in all Canadian medical schools through the Social Accountability Network of the Association of Faculties of Medicine of Canada. Each school was invited to participate in a virtual semi-structured interview or complete an electronic survey questionnaire examining SM structure, content, and assessment methods.

Results: Out of 17 medical schools, 11 participated, revealing common themes. All mandated SM education, predominantly during preclerkship. Reported student perceptions of SM varied from positive to negative and was perceived as distinct from traditional biomedical content. Faculty collectively found it difficult to assess students on their SM knowledge. Schools unanimously reported SM as a high priority and recognized the need for continuous curriculum adaptation. Notable differences included curriculum structure (block versus spiral) and SM integration with biomedical content (distinct versus fully immersed).

Discussion: The findings will inform the redesign and enhancement of the SM curriculum at the University of Ottawa and other institutions. While most Canadian medical schools contributed data, the study design did not allow for the determination of the most effective approaches. Nevertheless, this study advances understanding about SM education, facilitating alignment with evolving societal needs and the cultivation of more engaged, socially accountable, and patient-centered physicians on a national scale.

PME-46 Implementing a Spiritual History Taking Tool in a Clinical Skills Course for Pre-clerkship MD Students

David Kim, University of Toronto

Background/Purpose: Understanding a patient's spirituality is an essential component of holistic care. Despite this, spirituality is often unaddressed by providers and can contribute patient distress. At the University of Toronto, a Spiritual History Taking (SHT) curriculum has been developed and piloted within its Year 1 MD program. This study looks to examine the student perspective of this curriculum change during the first year of its in-person implementation following the COVID-19 pandemic.

Methods: Two online focus groups were conducted, each consisting of three 1st year medical students. The sample size was sufficient to reach data saturation. Following a defined interview guide, students were asked about their experience with the SHT session. Interviews were transcribed and analysed via Braun and Clarke's (2006) approach to thematic analysis.

Results: Three major themes were identified. Firstly, learners value in-person curriculum delivery. The inperson environment allowed learners to inquire about a sensitive topic and practice their interview skills with ward or standardized patients. Secondly, facilitator skill is essential to effective learning. The facilitator's expertise, ability to answer questions and provide feedback, and allocation of time influenced students' SHT experience. Lastly, students appreciate early integration of SHT in the medical school curriculum. Students understood spirituality as part of providing holistic care and appreciated the early exposure.

Discussion: This study illustrates the importance of integrating SHT early within a medical school curriculum. Through combining effective facilitators with in-person curriculum delivery, students identify a benefit to their clinical training and develop the skills to take a culturally competent and patient-centred spiritual history.

PME-47 <u>Understanding Ableism in Canadian Medical</u> Education

Zachary Ford, Dalhousie University

Background/Purpose: About one in five Canadians have one or more disabilities, whether it involves mental, cognitive, physical, or developmental ability. Over 30% of people with disabilities have concurrent chronic pain, indicating that pain is a major contributor to disability and daily function in this population. As medical students, for many of us, our education about disability began before our medical training, with what we see in the media, how people around us talk about disability, or people we know that have disabilities. Medical training is likely to reinforce focus on clinical manifestations of disability, which can result in partisan conversations about disability without consideration about the individual and community.

Methods: In collaboration with disability communities and advocates, we have developed an interactive module for our peers, which offers frameworks for medical students to break down biases related to disability and engage with non-medicalized content. This resource focuses on the history of ableism in society and medical education and gaps in disability curriculum within medical education.

Results: After launching our interactive content among other peers, we plan to survey them before and after completion of the module. This delivery model, if successful, will lay the foundation for future applications to teach medical students about other underrepresented groups in medical education.

Discussion: These modules will enable medical students to become more aware of their role within the larger medical institution and to begin to build foundations of advocating for competent and equitable care for people with disabilities.

PME-48 Evaluating the Implementation of 'mHealth' Supported Patient Navigation Strategies to Improve Cervical Cancer Screening and Linkages to Care

Melinda Chelva, Queen's University

Background/Purpose: Cervical cancer is the leading cause of female cancer in Tanzania. The Smartphone-enhanced Visual Inspection with/through Acetic Acid (SEVIA) application evaluates the validity and quality of visual inspection with/through acetic acid (prevention strategy), and allows for secure, real-time sharing of cervical images. However, it is critical to incorporate a 'package' of healthcare provider and patient-directed mHealth supported strategies to provide women with linkages to care and explore the implementation of these strategies.

Methods: We will recruit 1500 women between the ages of 30 and 49 years (ages 25-49 if HIV+). A facility-based cluster-randomized trial will be implemented to evaluate three patient navigation (PN) delivery strategies and their potential to be incorporated as added features to the SEVIA application: (A) community health worker assisted navigation, (B) nurse delivered navigation, and (C) SMS assisted navigation. Thirty health facilities in the Kilimanjaro region will be cluster-randomized to deliver a specific package of PN delivery strategies. Each woman will be randomized into one of the four experimental conditions. We developed effective qualitative tools using three implementation science frameworks to investigate the implementation of PN strategies to the SEVIA application. These tools were piloted in focus group discussions.

Results: Patients and providers indicated their preference to incorporate all three strategies to reduce loss to follow-up and maximize retention to care.

Discussion: There is a critical need to generate further evidence for implementation of effective and sustainable mHealth supported PN tools to optimize cervical cancer screening in African countries and reduce the number of women lost due to follow-up.

PME-49 <u>Theory and Practice in Georgian Medical</u> <u>Education</u>

Jilda Cheishvili, Sulkhan Saba Orbeliani University
Background/Purpose: The substantial rise in global population is associated with an escalating occurrence of both mortality and morbidity, resulting in an escalating demand for medical professionals across various fields. Georgia has become an appealing destination for international medical students and last years the number of accreted medical schools and international students are increasing dramatically.

Methods: The research is reflection of experience from external evaluators (authors) in MD program accreditation process through the Country since 2020 and analysis of survey with using mixed method, using both quantitative and qualitative methodology.

Results: • Medical programs in Georgia are attractive to international student's due to several factors: (accreditation from WFME, tuition fee, country stability, etc.) • Current students appreciate the educational environment characterized by clinical exposure and practicing doctors as instructors. They generally endorse studying in this setting, albeit with the consensus that dedicating additional time to problem-based learning and prioritizing real-life cases in the curriculum, they express satisfaction with the teaching quality. • Alumni highlight a noticeable divide between theoretical and practical coursework, need more time spend in clinical environment and more focus on clinical studying process, including communication with real patient. • Potential employers outlined: more focus on clinical skills and increase international activities.

Discussion: The WFME recognition and Country's character works very positively toward the education (income from the international students), but gap between theory and practice reflects to the education. Increasing MD schools and International student in Georgia affect to the quality of study, which is directly link to the healthcare and public health over the World.

PME-50 COVID-19 Induces Neuroinflammation and Suppresses Peroxisomes in the Brain

Andrej Roczkowsky, University of Alberta

Background/Purpose: Peroxisome injury occurs in the central nervous system (CNS) during multiple virus infections that result in neurological disabilities. We investigated host neuroimmune responses and peroxisome biogenesis factors during severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection using a multiplatform strategy.

Methods: Brain tissues from coronavirus disease 2019 (COVID-19) (n = 12) and other disease control (ODC) (n = 12) patients, as well as primary human neural cells and Syrian hamsters, infected with a clinical variant of SARS-CoV-2, were investigated by droplet digital polymerase chain reaction (ddPCR), quantitative reverse transcriptase PCR (RT-qPCR), and immunodetection methods.

Results: SARS-CoV-2 RNA was detected in the CNS of 4 patients with COVID-19 with viral protein (NSP3 and spike) immunodetection in the brainstem. Peroxisome biogenesis factor transcripts (PEX3, PEX5L, PEX11B, and PEX14) and proteins (PEX3, PEX14, PMP70) were suppressed in the CNS of COVID-19 compared to ODC patients (p < 0.05). SARS-CoV-2 infection of hamsters revealed viral RNA detection in the olfactory bulb at days 4 and 7 post-infection while inflammatory gene expression was upregulated in the cerebrum of infected animals by day 14 post-infection (p < 0.05). Pex3 transcript levels together with catalase and PMP70 immunoreactivity were suppressed in the cerebrum of SARS-CoV-2 infected animals (p < 0.05).

Discussion: COVID-19 induced sustained neuroinflammatory responses with peroxisome biogenesis factor suppression despite limited brainstem SARS-CoV-2 neurotropism in humans. These observations offer insights into developing biomarkers and therapies, while also implicating persistent peroxisome dysfunction as a contributor to the neurological post-acute sequelae of COVID-19.

PME-51 Towards consensus definitions for Individualized Learning Supports, Remediation, and Probation in Canadian Postgraduate Medical Education

Aleksandra Mineyko, University of Calgary

Background/Purpose: Individualized learning plans provide residents in academic difficulty with crucial support for progress through training. Remediation and Probation are formally outlined in policies at Postgraduate Medical Education Institutions. This National Collaboration aimed to achieve consensus among the 17 Canadian Medical Schools for definitions of individualized support available through institutional policy.

Methods: In February 2023, representatives from 17 Canadian Medical Schools, part of the National Collaboration Remediation Interest Group, were asked to submit institutional definitions of Remediation, Probation, and "other learning plans" abstracted from their PGME policies. These were collated using ChatGPT. The committee reviewed the consolidated definitions during a virtual meeting April 2023 and modified until consensus was reached. Final approval was sought via email after all changes were incorporated.

Results: Twelve (71%) of institutions submitted definitions. Remediation definitions between institutions differed in scope and purpose, triggers, duration, and plan structure. Probation definitions varied in their trigger, relationship to remediation, and expectations of progress. One institution did not use the term "Probation" in their policies. Other informal or preliminary learning support plans implemented prior to remediation were diverse with 12 different titles used across the Universities.

PME-52 <u>Effectiveness of Virtual Discovery Learning in</u> <u>Medicine</u>

Petar Petrov, University of Alberta

Background/Purpose: After pandemic restrictions were lifted, students were interested in retaining hybrid learning options. In response, the MD program offered a Virtual Discovery Learning (DL) stream during preclerkship. This study compares the learning outcomes of virtual vs in-person DL students in the Gastroenterology and Nutrition course.

Methods: Using mixed methods, students were separated into Virtual and In-person DL groups. Learning outcome data was collected and anonymized. Overall student performance for MCQ assessments and performance for DL specific questions in those assessments was compared between the two groups using two-tailed T-Test with two sample unequal variance. Qualitatively, we performed focus groups where students provided feedback on their Virtual DL experience, their reasoning for choosing the Virtual DL stream and their impressions of the experience.

Results: Statistical analysis of student performance data concluded that there were no statistically significant differences in grade averages between the Virtual and Inperson DL groups for the GI final exam (p=0.92), except for one DL specific question on the final (p=0.008). Focus group sessions identified 4 main themes for why students chose virtual learning: Covid-19; Flexibility; Accessibility and Learning Preferences; and Mental Health.

Discussion: Students who chose to attend Discovery Learning virtually did not experience any academic advantage or disadvantage in learning compared to students who attended DL in-person, and psychosocial benefits of virtual attendance were identified. This suggests that an optional hybrid model for DL is potentially beneficial to students without impacting learning outcomes.

PME-53 <u>Assessment of Emergency Medicine Sabbatical</u> Program: A Quality Improvement Audit

Grant Coome, Western University

Background/Purpose: Physician burnout is increasing in Canadian Emergency Departments. There is a paucity of research and knowledge sharing of sabbatical programs, particularly shorter sabbatical initiatives for physicians. The Division of Emergency Medicine (EM) at Western University established a one-month sabbatical program in 2013 to enhance physician wellbeing and career longevity. In 2023, ten years after designing, implementing and refining our program, we conducted a sabbatical program review.

Methods: Supported financially through academic practice plan funds, approximately \$1.5 million has flowed into this program, with more than 160 sabbatical months taken. A 28-question qualitative survey was distributed to evaluate the impact of the program on physician wellbeing and as a tool for continuous quality improvement of the program. A survey was sent to other academic EM centres across Canada to understand the presence and implementation of similar programs. Our goal was to understand the impact of the one-month sabbatical program on physicians. Our secondary goal was to understand if modifications were needed to improve satisfaction of those participating.

Results: Western's sabbatical program was successful in promoting wellbeing. Of recent hires, 61% felt it was an incentive to join our group. All physicians who have taken a sabbatical believe the program was worthwhile. Eighty three percent felt it enhanced work life balance and 98% wish to continue the program. Our review reveals that a short duration sabbatical program strongly promotes physician well-being and job satisfaction, is highly desired by our physician group, and could easily be incorporated by other academic medical programs across Canada.

PME-54 <u>A Novel Approach to Surgical Education for Medical Students: Introducing Competence-by-Design through Microlearning Modules.</u>

Sae Hoon (Dave) Gwun, University of Toronto

Background/Purpose: Current medical education provides limited exposure to surgical training prior to clerkship, potentially contributing to anxiety and dissatisfaction among medical clerks during their surgical placements. To address this gap, we propose integrating surgical microlearning modules (MLMs) based on the Competence-by-Design (CBD) framework, a novel approach to medical and surgical training by the Royal College of Physicians and Surgeons of Canada. These MLMs are designed to complement and reinforce the existing undergraduate surgical curriculum. Our objective is to assess the feasibility of integrating these MLMs earlier in medical education and to gauge their impact on self-reported learning outcomes.

Methods: We have developed 16 MLMs on introductory surgical knowledge and skills. We expect to recruit 50 University of Toronto medical students who will complete a brief questionnaire assessing their prior surgical experience and knowledge of CBD. Participants will then engage with MLMs and complete self-reflections after each module using ELM-Space, an online educational platform. At the study's conclusion, participants will complete a final questionnaire to share their experiences.

Results: Primary outcomes will encompass participant demographics (i.e. year of study, specialty of interest), progress tracking, engagement scores, module completion, module-specific self-reported learning outcomes (i.e. familiarity with module features, competencies, and milestones), and self-reflection (i.e. comfort with functioning in a surgical environment).

Discussion: Providing medical students with supplementary surgical resources may enhance their learning and ease their transition into the CBD framework during residency. This initiative addresses the crucial need for pre-clerkship surgical education and potentially revolutionizes the training paradigm for future surgeons.

PME-55 <u>Challenging systemic harm in competency-based</u> medical education: a qualitative emancipatory study to redefine the CanMEDS Professional competency

Rachel Crooks, University of Calgary

Background/Purpose: Systemic inequality in health care leads to inequities in care and treatment outcomes for equity-deserving groups who experience ongoing systemic harm within the health care system. Action is required to address the root causes and to educate health care professionals to engage in anti-oppressive practices. Definitions used in competency-based medical education (CBME) can be revised to address anti-oppression and systemic harm. This study aimed to redefine the CanMEDS Professional competency, focusing on the perspectives of people from equity-deserving groups.

Methods: We conducted an emancipatory qualitative study to center the perspectives of equity-deserving groups. Phase one included semi-structured interviews with participants from equity-deserving groups, analyzed using thematic content analysis to generate themes regarding the Professional role as experienced by patients. In phase two, modified nominal group technique sessions were held with community members and stakeholders from equity-deserving groups to discuss and confirm themes. A consensus-building group with health care professionals and health system stakeholders was then convened to revise the definition of the Professional role.

Results: Themes generated from the interviews in phase one (n=28) include: 1) health care experiences with professionalism; 2) equity-oriented domains of professionalism; 3) structural aspects of professionalism; and 4) ways to support improved professionalism. The themes from the interviews informed the consensus-based redefinition of professionalism, which incorporates concepts of equity, anti-oppression, anti-racism, and accountability.

Discussion: The revised definition of the Professional role allows for anti-oppressive competencies to be explicit and an expected part of education and practice to strengthen accountability to health systems safety.

PME-56 Challenges faced by IMG physicians participating in an IMG support program and suggestions on how they can be better supported

Loni Desanghere, University of Saskatchewan

Background/Purpose: Although various systemic supports are in place in Saskatchewan to facilitate international medical graduates' (IMGs') licensure to practice medicine, there is still a major challenge of low success rates into these programs and retention within the province. The purpose of this project was to explore challenges associated with IMG support programming and gather suggestions on how IMGs can be better supported in the province.

Methods: Twelve IMGs who were participating in a IMG support program in Saskatchewan participated in virtual semi-structured interviews. Transcripts were analyzed using thematic analysis in NVIVO.

Results: Participants were asked to discuss the challenges or roadblocks they experienced accessing support or assessment programs within the province. Participants discussed several topics related to challenges, including financial, information, communication between health organizations, experience and opportunities, emphasis on alternative careers, and resources for exams. When asked about recommendations on how IMGs can be better supported in the province, participants discussed several themes, such as better access to information, expanded support from IMG programs (e.g., employment, experience, encouragement), and prioritization of Saskatchewan residents.

Discussion: The data collected in this study was used to develop recommendations to improve options for IMGs in terms of educational programming, including supports for transition to IMG programs or medical residency.

PME-57 Hyperosmotic treatment as a potential therapy to mitigate glutamate accumulation and ischemic injury linked to astrocyte swelling

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Background/Purpose: Spreading depolarizations (SDs) enhance lesion progression and lead to cytotoxic edema in ischemic stroke. In our previous, in vivo experiments we observed that an enlarged cortical tissue depolarized simultaneously (SiD) upon ischemic tissue swelling. We set out to prove that the underlying process of SiD must be the impaired glutamate clearance caused by astrocyte swelling.

Methods: Brain slices from Wistar rats (n=18) were perfused with artificial cerebrospinal fluid (aCSF). Hypoosmotic medium (HM) was washed on the slices to induce edema, O2 was withdrawn to trigger a depolarization event. To characterize SD and SiD we used white light reflectance, local field potential and extracellular glutamate concentration recordings. Hyperosmotic medium (HRM; aCSF+100mM mannitol) was applied to counteract edema formation. Golgi-Cox, TTC staining were used to determine astrocyte swelling and ischemic injury.

Results: A first event (SD1) occurred spontaneously during HM incubation. Anoxia induced a subsequent SiD, which enlarged the depolarized area (76.8±11.4 vs. 60.9±10.7%, SiD vs. SD1), increased glutamate accumulation (1416.9±757.6 vs. 4837.0±2081.7μMxs; SD1 vs. SiD), intensified astrocyte soma swelling (37.86±2.61 vs. 55.63±6%; SD1 vs. SiD) and enhanced ischemic injury (5.0±1.1 vs. 35.8±3.0 particles per 1000μm2, SiD vs. SD1). HRM treatment prevented SiD and increased SD elicitation threshold (2422.5±341.7 vs. 54.0±2.1µC, HRM vs. HM). We conclude that glutamate accumulation due to astrocyte swelling supports SiD occurrence. SiD contributed to injury progression by enhancing ischemic injury. HRM treatment reduced SD susceptibility and prevented the cascade of events leading to SiD. Our results highlight the importance of anti-edema therapy in clinical practice.

PME-58 Shifting pre-clerkship education delivery with a focus on generalism.

Irene Ma, University of Calgary

Background/Purpose: In July 2023, Cumming School of Medicine (CSM) medical students started in a restructured undergraduate pre-clerkship curriculum, known as Re-Imagining Medical Education (RIME). One of RIME's four key principles is a focus on generalism. Previously, we have shown that the legacy curriculum had markedly reduced exposure to Family Medicine (FM) faculty relative to Internal Medicine (IM), when compared with the proportions of associated CaRMS seats and CSM departments/sections. The purpose of this study is to describe shifting our pre-clerkship curriculum guided by the principle of generalism.

Methods: A recruitment for generalist pre-clerkship educators (PCEs) was conducted through strategic collaborations and communications. All PCEs completed a 6-month teaching course with a focus on RIME principles as part of their onboarding. PCEs were assigned one or more clinical presentations, for which they were responsible for creating and delivering all content and assessment questions. Time-commitments were calculated by determining the proportion of weeks in which a clinical presentation is covered within the spiral curriculum.

Results: The marked disproportionality between the number of lecturers in FM vs IM (FM - 7.15%, IM - 43.02%) and lecture time (FM - 9.31%, IM - 39.89%) in the legacy curriculum has been shifted in the RIME curriculum (FM - increase of 194.36% and 146.66%; IM - decrease of 14.36% and 3.88%).

Discussion: Historically, challenges associated with the pre-clerkship curriculum at the CSM included the tendency to drift toward highly specialized content over time. With oversight from a generalism lens, recruitment has shifted the disproportionate representation of certain specialties within the curriculum.

PME-59 <u>The Impact of Technical Difficulties on Virtual</u> Multiple Mini Interviews

Ziqi Liu, University of British Columbia

Background/Purpose: Interviews are commonly used to assess medical school applicants' non-academic abilities. The COVID-19 pandemic forced such activity into a virtual space, but many desire continuation of that trend to reduce travel costs. The number of people and scheduling demands involved guarantee technical difficulties will arise, especially when virtual Multiple Mini-Interviews (vMMIs) are used. Ensuring fairness and validity demands understanding the impact of connectivity problems on candidate performance.

Methods: Applicants to the UBC MD Program and their interviewers were asked to report any technical difficulties they experienced during their 10-station vMMI: the stations involved, how long interruptions lasted, and type of difficulty. Station scores when difficulties arose were compared to other stations.

Results: Across 700 applicants, 324 (46.3%) reported a technical difficulty; on average they reported difficulty on 1.9 stations and loss of 2.4 minutes per 8-minute station. Candidates performed slightly, but significantly lower on stations with a difficulty (23.9 vs 25.2; p<0.05; d=.25). The amount of time lost was not associated with station score (r=.05; p>0.4). Those differences did not impact total scores, which averaged 25.0 for both those who experienced a difficulty and those who did not. Nor was technical difficulty associated with performance on the subsequent station.

Discussion: While many applicants reported technical difficulties, the majority involved minor lag or connectivity problems. Those who experienced a technical difficulty may have felt more anxiety, but overall MMI scores did not appear to change. Whether that arose due to their resilience, difficulty severity, or to raters making adjustments should be studied further.

PME-60 Impact of Post-Exam Processing on Student Performance

Irene Ma, University of Calgary

Background/Purpose: To enhance validity, transparency and fairness, the Cumming School of Medicine's Undergraduate Medical Education program utilizes a robust post-exam processing (PEP) procedure prior to setting Minimum Passing Levels and Mentoring Thresholds using the modified Hofstee Compromise method. In 2023, based on student feedback, the Student Evaluation Committee implemented a policy change from routinely removing all negatively discriminating questions to removing only moderately and highly difficult negatively discriminating exam questions. The objective of this study is to investigate how PEP affects examination statistics and performance of pre-clerkship students in summative exams.

Methods: Examination scores and performance metrics were collected retrospectively from Course 3 (Class of 2025, n = 166). Three PEP models were compared: A) original data without question removal, B) removal of all negatively discriminating questions and C) removal of moderately and highly difficult negatively discriminating questions.

Results: None of the students fell below the passing threshold for all three models (A: 63.89%, B: 63.54%, C: 63.90%), resulting in no failures or students requiring mentoring. The mean and standard deviation of the exam scores for each model were: A: 86.76, 5.34; B: 86.1, 5.66; and C: 86.56, 5.38. The alpha coefficient improved with PEP (model A: 0.64, B: 0.66, C: 0.66), and Cronbach alpha analysis demonstrated no gain in removing all negatively discriminating items versus only moderately/difficult negatively discriminating items.

Discussion: Preliminary results demonstrate a higher alpha coefficient without increased failure rate associated with PEP. Remaining pre-clerkship courses are currently being analyzed using the same models.

PME-61 <u>COVID-19 Vaccinations for Refugees and Newcomers in Calgary: The Role of International Medical</u>
Graduates

Fariba Aghajafari, University of Calgary

Background/Purpose: Diverse models of COVID-19 vaccination were available to refugees and newcomers in Calgary, Canada and surrounding area, in 2021 and 2022. This study explored the role of international medical graduates (IMGs) in COVID-19 vaccine delivery systems to better understand how these systems can effectively address factors of under-vaccination for refugees and newcomers.

Methods: Researchers conducted qualitative interviews with Government Assisted Refugees (n=39), Privately Sponsored Refugees (n=6), private refugee sponsors (n=3), and stakeholders involved in newcomer and refugee specific vaccination systems (n=13). Thematic analysis was conducted on primary data to explore strategies, barriers and strengths of models.

Results: Newcomer-specific (including refugees) and mainstream vaccination models were explored, and many specialized models engaged IMGs in their outreach and information provision strategies. IMGs hold a unique skillset due to their first language skills, and medical and cultural backgrounds which enables them to provide culturally responsive services to refugees and newcomers. Models demonstrated how partnerships between organizations, multi-pronged approaches, and culturally responsive services were crucial for success, and drew on the skills of IMGs to provide tailored vaccination services.

Discussion: IMGs complement strategies employed by refugee and newcomer specific models of COVID-19 vaccination. They enhance outreach efforts, information transmission, and trust building activities when embedded in culturally responsive manners. This research demonstrates that embedding IMGs in newcomer and refugee specific vaccination strategies has benefits for operations and patients, and suggests that embedding these personnel in any newcomer-health initiatives will have positive impacts on healthcare delivery.

PME-62 Research Productivity Among Canadian First Year Dermatology Residents - A 15 Year Analysis

Katrina Cirone, Western University

Background/Purpose: Academic research productivity is an essential component of medical training and one of the selection criteria evaluated by residency programs. In this study, we aim to quantitatively characterize research productivity among medical students who successfully matched into Dermatology residency programs across Canada.

Methods: A retrospective review was conducted to obtain the names of all residents that began training in all Canadian dermatology residency programs between 2008 and 2022. The database Scopus was searched to obtain metrics reflective of research productivity which included publication count, publications in dermatology, authorship position, and H-index for each match year. Descriptive, univariate, and bivariate statistics were used to identify and evaluate trends in research productivity among successful applicants.

Results: A total of 371 dermatology residents (90% complete data set) from the 11 Canadian residency programs producing 828 publications, of which 329 were dermatology-related were identified. Overall, 56% of residents had a minimum of one publication at the time of the match, with a mean of 4.06 + 5.07 publications and a mean H-index of 2.74 + 2.52. A significant increase (p < 0.001) in all research productivity metrics (number of publications, first author publications, publications in dermatology, and H-index) was observed during the 2020-2022 period compared to 2008-2010.

Discussion: Over the past 15 years, the amount of publications authored by first year dermatology residents has increased significantly. This may suggest an increased emphasis placed on medical research by both medical students and residency programs, a finding that has also been described in other competitive specialties.

PME-63 Easing the Transition to Clerkship – Perceptions of Clinical Clerks and Faculty of High Priority Topic Areas in a Transition to Clerkship Course

Kien Dang, University of Toronto

Background/Purpose: Although Black medical students are very underrepresented in Canada, there is a dearth of literature exploring their experiences. The last demographic survey to include students across all 17 medical faculties was conducted in 2006. Using data from the Pan-Canadian Demographic Survey we sought to explore the demographic make-up of Black medical students in a disaggregated fashion. This is the first indepth exploration of Canadian medical student demographics to include a large sample of Black students. Our findings provide an opportunity for faculties to evaluate their admissions processes and streams against social accountability mandates. The demographic profile also offers insight to support the creation of relevant and tailored programming for the BMSAC.

Methods: Between April and December 2021, students from 17 faculties completed our survey which was adapted from Dhalla et al., 2002 survey and the 2016 long-form census. Surveys were administered in English and French on the Qualtrics platform. Ethno-racial demographic questions were disaggregated and data for Black self-identified students was extracted and used for this descriptive analysis.

Results: We received 93 survey responses from self-identified Black participants. 63% were born outside Canada and 91% and 9% identified as Anglophone and Francophone respectively. 4%, 60% and 35% identified as non-binary, female and male respectively. Median age was 25 with the majority between 21 and 29 years. The average number of medical school application attempts was 2 with 39% accepted the first time. The top-ranked specialties were Family, Internal, and Emergency Medicine with choices based predominantly on personal skills.

PME-64 Role of faculty development workshop on 'Feedback" and effect of Feedback on cognitive competence of 2nd MBBS students: a mixed method study

Jyotsna Agarwal, Dr. Ram Manohar Lohia Institute of Medical Sciences

Background/Purpose: National Medical Commission of India, mandates regular feedback for the undergraduate students, but it's not often practiced. Lack of time and not knowing how to give effective feedback are often the reasons cited by teachers.

Methods: In this mixed method educational intervention study, we assessed usefulness of training workshop for facilitators on 'feedback process' and effect of giving constructive feedback to students on bridging learning gaps. Kirkpatrick model was used for measuring training effectiveness. Kirkpatrick level 1 (faculty reaction about relevance & utility), Level 2 (learning) was elicited pre and post workshop. Kirkpatrick level 2 (faculty learning) and transfer of learning to practice (level 4) of their giving feedback to students was measured from 62 phase II MBBS students who consented to participate.

Results: Facilitators were happy with feedback workshop and felt satisfied with feedback session conducted by them. There was significant improvement in performance of students after feedback session especially for low scoring students. A significant number of students agreed feedback made them aware of the right way to attempt answering questions (SI = 94.88) in examinations and to study right resource material and made them more confident. Workshop on need & process of "Giving Feedback" helped create noticeable change in perceptions and attitude of facilitators. Feedback sessions were well appreciated by students and it helped students in identifying lacunae in knowledge and providing blueprint to overcome those. It was felt that regular training workshop on feedbacks for facilitators may be required to have effective feedback process in place.

PME-65 Are we adequately teaching evidence-based medicine?

Elnaz Assadpour, Western University

Background/Purpose: Evidence-based medicine (EBM) is a core competency for medical trainees and physicians, and 96% of recent Canadian medical graduates reported confidence in practicing evidence-informed medicine in 2022. However, there is a paucity of objective, measurable data on EBM skills in undergraduate medical education.

Methods: This cross-sectional study assessed the retention of EBM skills amongst 1st, 2nd, and 4th year medical students. Students in the 1st and 2nd year had been enrolled in a mandatory, longitudinal research course, while 4th year students had not. EMB skills were measured using the validated Fresno test (12 open-ended questions), with voluntary participation. The overall cohort and subgroup scores were assessed using ANOVA.

Results: Overall, participants scored 55% on the Fresno test, consistent with 'novice' participants from previous validations studies. There were no significant differences in mean scores between students who had completed the course, versus those with partial or no completion. The mean scores were significantly lower in critical appraisal questions (59%) compared with scores on research questions (66%) (95% CI, p=0.046). Additionally, statistical questions had significantly lower scores (18%) than the critical appraisal or research questions (95% CI, p <0.0001).

Discussion: Students may not receive adequate training in EBM during medical school, despite graduates' perceived confidence in these skills. Moreover, a mandatory research course was insufficient to increase retention of EBM skills. The competency deficits in critical appraisal and clinically relevant statistical analysis deserves attention by educators, and may be better evaluated with objective EBM evaluation tools.

PME-66 <u>How does generative Artificial Intelligence change</u> our approach to Portfolio?

Julia Wimmers-Klick, University of British Columbia

How does generative Artificial Intelligence change our approach to Portfolio?

Background/Purpose: Portfolio is the longitudinal program through Y1 to Y4 in medical school, BC, Canada to facilitate professional identity development with a focus on soft-skill topics like professionalism, communication skills, diversity, and equity. Students submit after each in-person session a written reflective piece which will be assessed by the individual coach who gives written feedback and grades it as complete or incomplete. Since the appearance of ChatGPT, written submissions of students can not be checked for authenticity. How does this force us to reassess our approach? How to assess Portfolio students in the age of AI?

Methods: Focus group interviews including site leads, coaches, students, and administrators. Data analysis with SWOT framework.

Results: It opens a dialogue about the goals and objectives of the program. The main outcome of the interviews marked the focus on reaching the intrinsic motivation of students to reflect on the actual topics, their experiences insight, and outside their PF group. Away from rigid rules around the required submissions, offer alternative methods eg art pieces, and audio recordings. All participants agreed that PF is essential and plays an important role in med education and due to its nature needs specific attention in assessment. Reaching the intrinsic motivation of students to reflect and learn within the soft skills area is the most valuable and sustainable approach away from the need and easy-to-use Al tools to just deliver trackable pieces.

PME-67 <u>Transformer l'organisation du travail à ma faculté,</u> une compétence à acquérir ?

Julien Poitras, Université Laval

Background/Purpose: Les changements découlant de la pandémie et de la post-pandémie questionnent la façon d'opérer nos facultés. Leur pédagogie, mais aussi leur fonctionnement administratif: une partie de l'activité est dématérialisée, les liens entre personnel administratif, personnes enseignantes et étudiantes sont en partie virtuels. Il est temps de revoir la manière dont nos facultés opèrent et de les restructurer en phase avec les enjeux actuels. Malheureusement, les équipes dirigeantes sont souvent trop prises par les opérations quotidiennes pour réfléchir à leur organisation.

Methods: Un exercice FFOM (forces, faiblesses, menaces, opportunités), permettra aux personnes participantes d'établir certains enjeux spécifiques à leur institution. Ensuite, la méthodologie utilisée pour transformer la Faculté de médecine de l'Université Laval (FMED) sera partagée. En sous-groupes, les personnes participantes se projetteront à l'aide d'une grille d'analyse dans leur propre transformation, puis partageront avec l'ensemble du groupe quelques pistes qui pourraient être appliquées à leur faculté.

Results: La FMED suite à l'analyse de ses processus a favorisé l'approche matricielle, ce qui a permis, en conservant un lien fonctionnel, de déconnecter le lien hiérarchique entre les personnes directrices d'unités et le personnel administratif. Le personnel relève de cadres en charge des grands processus facultaires, s'assurant d'une uniformisation et d'une mutualisation du travail entre les unités. L'organisation physique de la faculté a même été remodelée en fonction de cette nouvelle structure administrative.

Discussion: Les facultés n'auront pas la même solution aux enjeux post pandémiques. L'atelier permettra d'amorcer une réflexion permettant de s'élever au-dessus du quotidien et d'amorcer un processus d'adaptation réfléchie aux nouvelles réalités.

PME-68 Evaluating Student and Teacher Perspectives on Peer-Led Mock OSCE: Using Medical Students to contribute to undergraduate OSCE development.

Junaid Shaikh, King's College London, Muhayman Sadiq, Suhaib Ali, Zakaria Rashid, King's College London

Background/Purpose: Objective Structured Clinical Examinations (OSCEs) are vital for assessing clinical competency in medical education. Peer-led teaching has gained prominence as an effective approach. This study examines how a three-month OSCE program with a mock OSCE impacts 3rd year medical students and explores the views of 4th and 5th year medical student educators on skill enhancement. This study aims to understand student perceptions of the OSCE program, including the mock OSCE, and evaluate its effect on the skill development of 4th and 5th year medical student educators.

Methods: A structured three-month OSCE program involved 3rd year students in weekly sessions led by 4th and 5th year student educators. It culminated in a one-day mock OSCE for 80 students. Questionnaires captured student opinions on the program and mock OSCE. Simultaneously, 4th and 5th year medical student educators' insights were collected. Data underwent quantitative and qualitative analysis.

Results: Among 80 students, 64 responded (response rate: 80%). Most students found the program boosted confidence (78.1%), used effective resources (75%), was well-organized (73.4%), and aligned with their learning needs (71.9%). Educators reported improved teaching abilities (90%) and sharing of clinical insights (80%). Of the students providing OSCE grades (n=33), all scored 66% or higher. The study highlights the success of the OSCE program and mock OSCE in positively impacting 3rd year students. The program improved clinical skills and readiness for final exams. Involvement of 4th and 5th year medical student educators demonstrated effective guidance. Peer-led education benefits students and educators alike.

PME-69 <u>Collaborating on a Mechanism for Optimizing</u> Clerkship Schedule Allocation

Mike Paget, University of Calgary

Background/Purpose: A challenge facing many medical schools is balancing student interest against the limitations of clinical capacity. Paper models of schedule optimization are subject to bias, and are cumbersome to run multiple times. To address this, a team from the University of Calgary and the University of Alberta collaborated to create and implement a solution for rotation matching.

Methods: A macro driven solution was created that applies a best fit approach to sorting students against available rotation capacity. Using Microsoft Excel, the process works using the following data inputs: capacity for each rotation, student list, student rank of each rotation. The macro populates the schedule by randomizing the student list, and placing students in their top ranked rotations that have capacity. Each generated schedule can be compared to select the schedule that has the best outcome for most students.

Results: A macro driven solution was created that matches student preferences with rotation capacity. This process was successfully used in rotation selection for the internal medicine subspecialty clerkship at the University of Alberta in Spring, 2023.

Discussion: This selective scheduling process automates the creation of a fairly distributed schedule based on student desires and clinical capacity. It generates a performance metric for each batch which allows each batch to be compared. This solution optimizes the schedule creation from a resource perspective for our programs, and generates the best possible outcome for students. Training materials and a generic version of this Excel Spreadsheet are available to any interested parties.

PME-70 <u>Capturing Emotions with Content Analysis: How do Residents Deal with Harassment While Placing a Central Line?</u>

Byunghoon (Tony) Ahn, McGill University

Background/Purpose: Anti-harassment training is vital for medical trainees, ensuring psychological safety and ultimately good patient outcomes. Prior research has shown emotions profoundly impact such training. We therefore explored the roles of emotions in delivering harassment bystander simulation training to medical residents. Our research examined: 1) What were the predominant emotions the residents had for the simulation training; 2) Were emotions related to specific intervention strategies the residents employed?

Methods: 55 residents participated in a simulation where they inserted a central line on a mannikin, while witnessing a senior resident harassed a medical student. We analyzed audio from 34 consenting residents' debriefings and coded their intervention strategies. We applied a quantitative content analysis based on Duffy's Medical Emotion Scale to identify emotions from the debriefings, followed by Kendall's tau-b tests to link strategies with emotions.

Results: The predominant emotions were: Anxiety (82.35%); compassion (58.82%); confusion (52.94%); frustration (38.24%); surprise (20.59%); and enjoyment (20.59%). The "direct" strategy was negatively associated with shame (τ b(30) = -.430, p = .017); while the "delay" strategy was positively related to confusion (τ b(31) = .394, p = .026).

Discussion: Consistent with past research, anxiety emerged as a dominant emotion. Residents feeling shame—from not helping the victim or from performing tasks inadequately—tended to avoid direct confrontations. Residents who were confused and uncertain about how to intervene, tended to indirectly intervene post-harassment (i.e., "delay"). Our results underscore the emotional complexity of addressing harassment. Future simulation training should incorporate these emotions to enhance residents' understanding of anti-harassment strategies.

PME-71 Integrating Planetary Health Education into Medical Training: The University of Ottawa Experience

Xiu Xia Sherry Tan, University of Ottawa

Background/Purpose: In face of climate change being declared as "the biggest health threat facing humanity" by the WHO, the Association of Faculties of Medicine of Canada released a statement, urging health institutions to build climate-resistant health systems and develop planetary health (PH) education. However, inclusion of PH in medical schools has lacked a comprehensive framework for content and implementation, due to various limitations including limited faculty time and competing learning priorities. Here, we describe a practical, multistakeholder approach for integration of PH to curricula.

Methods: A PH Working Group was assembled, comprising faculty, medical trainees, and a community partner. Guided by the Planetary Health Educational Competencies developed by the Canadian Federation of Medical Students Health and Environment Adaptive Response Task Force, high-yield learning objectives (LOs) were developed. Emphasis was placed on including LOs that promoted knowledge and skills-based competencies to address climate change impacts specific to our local environment. A systematic curriculum scan was performed to identify where these LOs could be integrated into existing pre-clerkship and clerkship educational activities.

Results: A total of 56 new PH LOs were proposed to be longitudinally integrated into existing lectures, case-based learning, physician skills sessions, self-learning modules, and leadership electives. A document was developed for the curriculum renewal committee.

Discussion: PH education is critical for preparing physicians to practice in a world increasingly impacted by climate change. Academic health institutions can utilize this model to adapt their curricula to meet the needs of healthcare professionals. Future directions include implementation and extension to post-graduate medical curricula.

PME-72 <u>Shifting the Balance of Pre-Clerkship Governance</u> **Irene Ma,** University of Calgary

Background/Purpose: In 2018, the Re-Imagining Medical Education (RIME) project was initiated to transform the pre-clerkship education at the Cumming School of Medicine (CSM) from the block-driven, system-based model. Of the four pillars of RIME (Patient-Centered, Generalism, Integration, and Spirality), Generalism was a challenge, in part due to the landscape of clinical faculty at CSM consisting of a disproportionate amount of subspecialists and generalists with academic appointments. Here, we describe rebalancing the preclerkship governance structure in RIME.

Methods: The legacy system-based curriculum had clear clinical division associations (e.g. course leaders for Course V — Neurosciences were recruited from the Department of Neurology). Delivery, policy and reporting were managed within the same committee as overall curricular content. In RIME, implementing the Generalism pillar required making generalism the forefront of hiring decisions. Voting membership from the legacy Pre-Clerkship Committee (PCC), and from the RIME PCC were collected and tallied.

Results: The restructured RIME PCC saw an increase in representation from medical students (+70.0%), and faculty from the Departments of Pediatrics (+240%), Anatomy (+70.0%), Pathology (+70.0%), and Family Medicine (+45.7%). There was a reduction in members from the Departments of Internal Medicine (-5.6%) and Neurology (-15.0%). Leadership recruitment challenges were experienced for five CSM departments. Within the RIME governance system, content changes will be passed through a separate committee to ensure that individual changes are balanced with the pillars of RIME.

Discussion: We welcomed the first cohort of students in RIME in July 2023, where the pre-clerkship governance was restructured to support Generalism.

PME-73 <u>Examining Social Determinants of Health</u> Education in a Pediatric Residency Program

Nancy Lum, University of British Columbia

Background/Purpose: Social Determinants of Health (SDOH) account for 30-55% of health outcomes, yet medical curricula often emphasize medical expert competencies over psychosocial aspects of care. Our ongoing quality improvement project aims to increase resident physician proficiency in assessing SDOH within our Canadian pediatric residency program. We present our environmental scan of the program's curricular climate, identifying barriers and facilitators affecting trainee readiness to address SDOH.

Methods: We conducted a chart review on 20 randomly-selected initial consultations by residents in our continuity clinic (2021-2022) and used descriptive statistics to characterize the depth and frequency of psychosocial histories. We surveyed 13 residents before their Social Pediatrics rotation to measure a baseline self-rated proficiency in assessing SDOH. We conducted interviews and focus groups with residents, faculty, and interdisciplinary stakeholders.

Results: Only 31% of surveyed residents considered themselves proficient at assessing SDOH. While all reviewed consultations included a psychosocial history, none documented a screen for financial strain, food or housing insecurity, or transportation needs. Interviews and focus groups revealed barriers, including curricular gaps, limited resident experience in psychosocial historytaking, and hierarchies of learning that prioritize medical knowledge. Our narrative data highlighted residents' strong interest in additional SDOH curriculum, as they often feel ill-equipped to address patients' social needs.

Discussion: We identified knowledge, clinical experience, and attitudes as primary drivers for increasing residents' self-rated proficiency in assessing SDOH. This will inform our change theory as we implement our Plan-Do-Study-Act cycles, with the goal to enhance residents' readiness to support patients within their broader social contexts.

PME-74 <u>Curriculum caché en éducation médicale :</u> <u>Recherche-intervention pour le développement d'un outil</u> <u>réflexif participatif</u>

Clara Dallaire, Université de Montréal

Background/Purpose: La formation médicale est extrêmement exigeante. Le curriculum caché (CC) en éducation médicale est un ensemble d'influences se manifestant au niveau de la structure et de la culture organisationnelle. Habituellement présenté comme exerçant des influences négatives auprès des étudiants en médecine, il est important dans la professionnalisation des apprenants, le développement de leur morale et de leur éthique, ainsi que des relations cliniciens-patients. Ses influences positives sont couramment occultées. Il importe de trouver une facon constructive d'accompagner les enseignants des milieux cliniques pour le rendre explicite et ainsi permettre de l'aborder sur le terrain, de manière réflexive rejoignant les différentes réalités cliniques et s'adaptant aux singularités des programmes de médecine et des individus.

Methods: Une recherche-intervention (RI) à devis mixte est utilisée pour ce projet. La RI sert d'avancement des connaissances théoriques et pratiques et d'action dans le milieu et s'inscrit dans une démarche systémique.

Results: La difficulté d'intervention au niveau du CC réside principalement du fait qu'il se déploie de façon implicite dans les milieux cliniques. Sa gestion demeure un défi pour les établissements d'enseignement puisqu'ils ont peu d'influence sur ce qui est enseigné informellement sur le terrain.

Discussion: Défis et enjeux du CC et les besoins identifiés de créer des milieux positifs propices à l'apprentissage et au travail, requièrent des programmes d'enseignement en médecine qu'ils identifient des approches pour aborder différemment les problématiques associées à sa gestion. Rendre le CC explicite pour apprenants et enseignants, permettra une réflexion sur la pratique médicale pour ultimement améliorer les soins aux patients.

PME-75 Implementation of Self-determination Theory in Pediatrics Clerkship Academic Half Days: A Quality Improvement Initiative

Amanbir Atwal, University of British Columbia

Background/Purpose: At the University of British Columbia, academic half day (AHD) in pediatric clerkship consisted of weekly lecture series, often reliant on didactic lectures with minimal interaction. We undertook a quality improvement project to overhaul the AHD experience using self-determination learning theory (SDT). We aimed to evaluate if the three fundamental tenets of SDT: autonomy, competence and relatedness, could be incorporated at the undergraduate training level to increase learner motivation.

Methods: Lecture series were replaced with self-study time and interactive case-based discussions centered around a weekly theme and study "roadmap" of suggested resources. At the end of their rotation, students were surveyed using a modified version of the Basic Psychological Need Satisfaction at Work Scale.

Results: Of 62 students who completed the curriculum to date, 17 (27.4%) participated in the survey. There was moderate autonomy (4.75, SD 0.80) and relatedness satisfaction (5.10, SD 0.69), with lower competency satisfaction (4.29, SD 0.97). Total aggregate score for basic psychological need satisfaction was 4.74 (SD 0.65). Qualitative feedback was mixed. Some students expressed discomfort with the degree of independence and self-guided learning while others "appreciated [choosing] which resources to utilize and when."

Discussion: Overall, this pilot quality improvement project showed it is feasible to incorporate tenants of SDT in AHD curricula. However learners may struggle to feel competent when introduced to self-determination learning theory early in their clinical training. This suggests a need for more gradual increase in autonomy as learners progress in their training and develop intrinsic motivation for independent life-long learning.

PME-76 <u>Micropolitics of Interprofessional Education</u> **Jinelle Ramlackhansingh,** Memorial University

Background/Purpose: The purpose of IPE is to demonstrate that collaboration and teamwork are essential and to learn the roles of other professions. The literature shows that IPE can hinder professional identity formation. Each profession tries to define a "sphere of practice and role in patient care developed in 'silos'." IPE is considered "boundary work." The "deterritorialization" of doctors' traditionally unchallenged work can lead to micropolitics, where traditional hierarchies challenged. The purpose of Inter-Professional Education (IPE) is to demonstrate that collaboration and teamwork are essential and to learn the roles of other professions. The literature shows that IPE can hinder professional identity formation. Each profession tries to define a "sphere of practice and role in patient care developed in 'silos'." IPE is considered "boundary work." The "deterritorialization" of doctors' traditionally unchallenged work can lead to micropolitics, where traditional hierarchies are challenged.

Methods: These findings are part of a critical ethnography examining professional identity. Data was collected by doing, monthly focus groups with students.

Results: There was evidence of tension and micropolitics while the students discussed clinical cases, "Every single case we do is a doctor messed up...I mean, the nursing profs in particular... it's here's how the doctor messed up." The medical students, the future doctors, felt belittled by the nursing faculty, who showed that it "is always the doctor's fault." They reacted through "deterritorialization" and "boundary work," as "...the nurses basically talk like [they] can do all the rest of our roles."

Discussion And Conclusion: The understood ideology is that physicians have the highest professional status. The medical students were challenged to think about their role in collaborative practice. The students seemed to have missed the point of the learning experience and instead tried to re-establish their physician superiority in IPE. This shows that the assumption that the doctor is the ultimate authority on the clinical wards is embedded early in medical students' professional identity. Medical students need to learn the importance of interprofessional practice. Robust faculty development sessions will be needed.

PME-77 The exploration of new to practice surgeons as surgical educators: navigating the tensions between competing roles.

Kimberly Stewart, University of British Columbia

Background/Purpose: New to practice surgeons face challenges with starting independent practice. Specifically in the operating room, the new surgeon must develop their own independent clinical competence as the most responsible physician, and many simultaneously hold a new role as a surgical educator. The surgeon must navigate these roles which are in tension in the operating room, balancing patient care versus trainee education. Role theory (Lynch, 2007) describes "role strain" where an individual holds roles that have diverse expectations, and "role conflict" when differing roles contradict. The process of "mental weighing" accounts for intrinsic factors ("voluntary pushes") and extrinsic factors ("involuntary pulls") which influence the individual to switch between roles.

Methods: The methodology for this qualitative study is constructivist grounded theory. Utilizing role theory (Lynch, 2007) as a sensitizing concept, semi-structured interviews will be used to understand the mental weighing that new to practice surgeons (6-24 months, varying surgical specialties, across Canada) do as they manage their new roles of most responsible surgeon and surgical educator in the operating room.

Results: Work in progress, will have interim data.

Discussion: Transition to practice is a stressful time with minimal support. Supporting junior faculty in this transition is important to wellness, longevity, and for promoting an effective educational environment for trainees. We aim to deepen our understanding of how new to practice surgeons navigate the tensions between these roles, improving conceptualizations of factors that drive the ability to switch between them. By understanding these, educational interventions and institutional structures can be developed to support junior surgical faculty.

PME-78 How to effectively educate medical undergraduate students to teach patients and to teach patients' next-of-kin

Melanie Coulson, Imperial College London Medical School

Background/Purpose: Review of the medical education literature highlights the importance of educating medical students how to teach effectively. Literature highlights the benefits from this, including; future teaching roles, better communication with patients and for development of their own leadership and learning. However, there is limited research which explores the importance of educating medical students how to teach a patient's next-of-kin (NOK).

Methods: Aims of this research included: 1. Investigate how to effectively educate students to teach patients and to teach patients' NOK 2. To differentiate teaching patients with teaching patients' NOK This mixed methods research included an initial voluntary anonymous online survey sent to all the cohort, mostly consisting of qualitative questions. Following this, focus groups are planned which will be analysed thematically. The population investigated in this research were students in their third year at Imperial College London Medical School.

Results: Initial results highlighted the cohort thought they had a lack of knowledge and confidence in educating patients' NOK prior to the sessions. Their exposure to witnessing this skill by seniors varied. Use of models to structure this communication skill and knowledge set was thought to be helpful. Results demonstrated that there is a need to include educating students how to teach patients and patients' NOK within clinical practice. Incorporating this into the medical school curriculum could be beneficial to improving communication skills and clinical practice which is likely to improve clinical outcomes. This is relevant to all medical students.

PME-79 <u>Learning to Fly: An Interprofessional Approach to</u> Teaching Clinical Procedures in Primary Care

Thea Weisdorf, University of Toronto

Background/Purpose: Learners from diverse healthcare disciplines are typically expected to attain clinical competency within silos and by implementing the adage "See one; do one; teach one". This approach is not always patient-centered and does not always provide learners with experiences or opportunities to communicate uncertainties or questions. An interprofessional approach to clinical skills teaching and faculty development aims for our teachers and learners to glean knowledge and skills in a standardized and holistic way, improve professionalism and communication, and ultimately enhance patient safety and health outcomes.

Methods: This was a virtual, 3-hour Mainpro accredited faculty development session involving physicians, nurses, nurse practitioners and health professional educators. This included a didactic review of recommended approaches to teaching clinical skills, delivering feedback and determining competency while teaching a procedural skill. This was then demonstrated by videoing a sequenced approach to teaching the procedural skills with interdisciplinary providers. To consolidate faculty knowledge using this method, a review occurred in virtual small groups with the tasks of "building a paper airplane", followed by a final debriefing in larger clinical teams for reflection and feedback

Results: 25 evaluations representing a 26% response rate (N=95 participants). The overall session score was 4.58/5, with respondents agreeing or strongly agreeing that the program content enhanced their knowledge (96%), the purpose of the session was clear (92%), and the session met its stated objectives (100%). They shared many positive comments that the session stimulated them to think about issues relevant to their job, their role, and how they teach.

PME-80 The Benefits and Challenges of Student-Generated Open Education Resources (OERs)

Si Zhe Ng, University of British Columbia

Background/Purpose: The lack of accessibility to high quality textbooks remains to be a major obstacle to education. Open education resources (OERs) are freely available learning materials which users can reuse, retain, revise, remix and redistribute without any restrictions. Research shows that the use of OER lowers the cost for students to learn, while allowing educators to tailor the content to match specific learning objectives. However, the adoption and availability of OERs in the medical field remains limited. There is a lack of incentive for professionals or faculty members to develop OERs, making them unsustainable. Research suggest that engaging students in OER development can enhance their learning experience, and improve the quality of materials related to equity, diversity and inclusivity. Hence, this study explores the impact of student involvement in OER development to student learning, quality and diversity of OERs, students' professional development and any challenges with involving students in OER development.

Methods: Benefits and challenges experienced by students, and feedback from faculty members on feasibility and quality of student-generated OERs will be recorded using online questionnaires. A more comprehensive understanding of students' experiences with OER development will be explored in individual interviews.

Results: Qualitative data from both students and stakeholders will unveil any benefits to student-generated OERs, assess the feasibility of involving students in OER development, and identify challenges associated with this approach.

Discussion: This study will explore the potential benefits and current barriers to involving students in OER development and provide a clearer understanding of the sustainability of student-generated OERs.

PME-81 Assessment of Social Accountability in a private Mexican medical school as an indicator of patient-oriented research and teaching.

Gilberto Hiram Acosta Gutierrez, Instituto Nacional de Ciencias Médicas y Nutrición "Salvador Zubirán"

Background/Purpose: Social accountability (SA) in medical education means a willingness and ability to adjust to the needs of patients and health care systems nationally and globally. It also implies a responsibility to contribute to the development of medicine and society through fostering competence for research and improvement within each medical school. We assessed the SA perceived by medical students within their educational program.

Methods: The present study is a cross-sectional online survey using the IFMSA SA Assessment Tool developed by international medical students based on the SA concept by the World Health Organization. The tool consists of 12 items with four options to rate the performance of the school from zero to three points. The population was students from "Facultad Mexicana de Medicina de la Universidad La Salle" a private Mexican university. The survey was shared via Microsoft Forms with the support of the educational department of the university, and restricted to the students' institutional emails.

Results: Results will be analyzed in SPSS 27.0 MacOS Ventura 13.3.1 between November and December 2023, using Google Spreadsheet for data entry and coding.

Discussion: To our knowledge, this is the first study evaluating the perception of medical students in SA in Mexico. On the other hand, as SA represents a mandatory for medical schools, the present work helps to provide faculties usefulness of their current strategies to its integration. Nevertheless, the main limitation is that we are unable to perform a study that encompasses the inequalities in Mexican medical education.

PME-82 Dr

Hadal El-Hadi, University of British Columbia

Background/Purpose: The Hidden Curriculum (HC) is defined as a subconscious method of socialization taught in academic settings, reinforcing societal norms and rules. Few publications discuss the consequences of the medical HC in Canada. Studies have demonstrated that Black residents and physicians have different experiences from others where they do not feel welcome nor belong in academia. This needs to be explored further.

Methods: Black Physicians of Canada conducted an anonymized survey to assess experiences of Black residents and physicians regarding HC for quality improvement. The survey was via online platform and included 19 questions on demographics, knowledge of and experience with HC, and resources to navigate it.

Results: 44 responses were analyzed. 36% of participants were residents while 62% were physicians. Only 29% of respondents felt that there was a safe reporting system of discrimination and harassment without fear of retribution. Two themes were identified. The first was the impact of the HC leading to less opportunities for mentorship and sponsorship, connecting and networking, discriminating admissions and promotions processes, and hiding Blackness. The second was that HC illuminated differing expectations for Black residents and physicians and the power differential among peers.

Discussion: Black residents and physicians experience the HC differently than their peers, spanning throughout their career. This can limit career advancement and promotion. Future studies can explore how the Black HC could be addressed to support Black residents and physicians in order to produce a strong diverse medical workforce and a safe patient environment.

PME-83 A Multi-Stakeholder Qualitative Exploration of Factors Affecting Implementation of a Novel Experiential Medical Student Quality Improvement and Patient Safety Training Program

Muhammadhasan Nasser, University of Toronto

Background/Purpose: The Quality Improvement Experiential Student Training (QuEST) Program is a novel longitudinal theoretical and experiential-based quality improvement and patient safety (QIPS) training program for undegraduate medical students at the University of Toronto. Quantitative pilot program feasibility and effectiveness studies of were conducted during the 2021-2022 and 2022-2023 academic years, respectively. However, there is no existing qualitative exploration of the factors supporting the implementation and sustainability of similar training programs. Therefore, this study aims to gather qualitative feedback from stakeholders involved in the initial development and first two academic years of the novel QuEST Program to identify the barriers and facilitators to implementing experiential co-curricular QIPS training programs.

Methods: Stakeholders across the QuEST Program were recruited via email invitation for semi-structured interviews about their experiences in the program. Interviews were audio-recorded and transcribed. Inductive thematic analysis will be used to code data and synthesize emergent themes.

Results: Data collection is ongoing. Findings will be available at the time of presentation.

Discussion: A multi-stakeholder qualitative exploration will provide novel insights into the factors affecting the development and implementation of a longitudinal experiential-focused QIPS training program, as well as provide recommendations for implementing similar training programs in undergraduate medical education.

PME-84 <u>Integrating environmental sustainability into a family medicine resident quality improvement curriculum</u>

Margarita Lam Antoniades, University of Toronto

Background/Purpose: "Climate change is the greatest global health threat facing the world in the 21st century" Healthcare is a major source of greenhouse gas emissions globally. Canada has one of the highest per capita healthcare sector carbon emissions in the world. Primary care has a pivotal role to play in creating more sustainable health systems. There is a need for family medicine resident quality improvement curricula to include content on environmental sustainability. 1 The Lancet Countdown on health and climate change 2Watts N. et al. 2019 The 2019 report of THe Lancet Countdown on health and climate change: Ensuring that the health of a child born today is not defined by a changing climate, THe Lancet, VOLUME 394, ISSUE 10211, 3 MacNeilll et al. Planetary Health Care: A Frameworkf ro Sustainable Health Systems, Lancet Planetary Health, VOLUME 5, ISSUE 2, E66-E68, FEBRUARY 2021

Methods: We introduced elements on environmental sustainability into the resident quality improvement curriculum for the 2023-2024 academic year for family medicine residents at the University of Toronto in the form of online material, in-class didactic material and information to support resident QI practicums. Evaluation of learning will be obtained through survey data at the completion of the curriculum.

Results: Results are pending.

Discussion: This poster will describe our experience with the integration of environmental sustainability into a preexisting QI curriculum for family medicine residents and evaluation results. This will be relevant for other educators looking to integrate environmental sustainability into their quality improvement curricula. PME-85 Meet the "McMaster TA translations": precise English translations of the Terminologia Anatomica – helping a world that doesn't read Latin

Stephen Russell, McMaster University

Background/Purpose: The Terminologia Anatomica (TA) is the current standardized list of Latin anatomical phrases naming all body parts, introduced in 1998 to replace the Nomina Anatomica, versions of which had been the standard nomenclature since 1895. Our project focusses on the lack of proper English translations to accompany the Latin phrases of the TA. The TA itself offers what it terms "English equivalent names", which can easily be mistaken for translations; but these are actually the original English names for the same body parts. The fact that these are so easily mistaken for translations often leaves those who use the TA unsure as to exactly how the Latin terms connect to the more vernacular versions. More broadly, this can mislead all those who use the TA students, health professionals, and researchers – since the disconnect between the Latin phrases and their vernacular versions causes them to see the phrases as mere barcodes to be memorized, rather than as complex names having their own consistently used meaningful parts and logic.

Methods: We are currently building precise English translations (our "McMaster translations") for the more than 7,000 terms of the TA.

Results: We are proposing to the anatomical/medical community that the TA include our very literal English translations for each Latin phrase, consistent with the original grammar. Although the TA is meant to be universal, its current lack of universal acceptance is partly due to the hurdles created by eschewing literal translations.

PME-86 The Impact of COVID-19 on Medical Students
Applying to General Surgery in the CaRMS Matching
Process

Gladys Bruyninx, University of Saskatchewan

Background/Purpose: COVID-19 has impacted medical students across Canada with time away from rotations. rescheduled clerkship electives, cancelled away electives and virtual interviews. Prior to the COVID-19 pandemic, fourth-year medical students would travel across the country for electives and social events before applying and interviewing. Considering the drastic shift to online interviews and socials in 2021, new initiatives were taken, including creating social media page for most Canadian residency programs and online social sessions. Few studies have reviewed the impact of this shift on incoming Canadian general surgery residents. Based on applicants' experience prior and during COVID-19, we aim to elucidate the impact of the pandemic's consequences on the CaRMS application. We plan to evaluate the pros and cons of migrating to a virtual-only process and the subsequent effect on applicants' chances of applying to their top program.

Methods: We propose to carry out a pan-Canadian survey to review the 2020, 2021, 2022 and 2023 cohorts to assess their experience before and during COVID-19 during the CaRMS process.

Results: We will review the CaRMS website's statistics provided on the match and perform a literature review on the influence COVID-19 had on the CaRMS process.

Discussion: This study will help inform Canadian residency programs on medical students' experience and perception of applying online to a residency program. It will also be beneficial to outline and discuss the pros and cons of using online resources and processes to assist Canadian residency programs make the best decision regarding the CaRMS process.

PME-87 <u>The Pathological Mechanisms and Treatments of</u> Tinnitus

Sana Saeed, CMH Lahore Medical College

Background/Purpose: Tinnitus is defined as the ringing, hissing, clicking or roaring sounds an individual consciously perceives in the absence of an external auditory stimulus. It is an exhausting symptom for an individual to live with for, most likely, the rest of their life. Currently, the literature on the mechanism of tinnitus pathology is multifaceted and its management focuses on implementing tinnitus masking/reducing therapies rather than tinnitus cessation. Therefore, this review serves to explore and systemize the current and relevant tinnitus pathophysiology mechanisms and treatments available for patients.

Methods: This literature review which includes the following exclusion criteria: tinnitus in children, tinnitus pathophysiology articles before 2010, tinnitus treatment/therapeutics articles before 2015. The inclusion criteria included articles testing treatments on people or animals.

Results: This review analyzed 93 articles.

Discussion: Tinnitus pathophysiology is two-fold: cellular and system level. Cellular level mechanisms include increased neuronal synchrony, neurotransmission changes and maladaptive plasticity. At the system level, the role of auditory structures, non-auditory structures, changes in the functional connectivities in higher regions and tinnitus networks have been investigated. The exploration of these mechanisms creates a holistic view on understanding the changes tinnitus pathophysiology tinnitus. The treatments designed for tinnitus are numerous, with varied levels of success. They are twofold: some focus on tinnitus cessation (including cochlear implants, deep brain stimulation, transcranial direct current stimulation and transcranial magnetic stimulation) whereas the others focus on tinnitus reduction/masking (including hearing aids, sound therapy, cognitive behavioral therapy, tinnitus retraining therapy, and tailor-made notched musical training).

PME-88 Growth and Iterations of a Resident-Led Mock Interview Session for Canadian Resident Matching Service (CaRMS) Applicants

Johanna Holm, University of Calgary

Background/Purpose: After the historically poor Cumming School of Medicine (CSM), Canadian Residency Matching Service (CaRMS) match of 2019, an initiative to improve interview skills for the class of 2020 onwards was initiated by the Student Advocacy and Wellness Hub (SAWH).

Methods: Engaging residents and former grads who have recently participated in the match, to volunteer an evening and facilitate student group interview practice sessions followed by resident and peer feedback. Initially, students were matched to discipline-specific residents on a one-to-one basis. Based on many years of feedback, students are now matched to groups with a non-discipline-specific resident. The student groups are structured so there is minimal overlap in the discipline(s) the students applied to in CaRMS.

Results: Student engagement has risen numerically each year. Feedback has been consistently positive. Students appreciated the opportunity to practice in a pressured environment, hear how their peers approached questions, and the opportunity to receive resident feedback. Resident volunteers are now inspired by their experience with this event and find it rewarding to continue on as interviewers.

Discussion: Increased interview practice may have partially contributed to improvements in the CaRMS match compared to 2019. Student impression of the event is that it is of high value. Every participant who completed the survey found the session 'very helpful'. Attendance has grown from: 2020: 76 2021: 109 2022: 112 2023: 116 University of Calgary CaRMS Unmatched Data: 2018: 12 2019: 22 2020: 12 2021: 10 2022: 10

PME-89 <u>Discussion of physician illness within physician</u> health and wellness literature: A narrative review.

Emily Macphail, University of Alberta

Abstract unavailable.

PME-90 Mapping the Landscape of Rural Resident Physician Wellness Using Critical Realist Inquiry: Calling All Preceptors and Community!

Aliya Kassam, University of Calgary

Background/Purpose: It is unclear how resident well-being manifests in rural training settings. This lack of understanding can lead to difficulties in the development, implementation, and sustainability of wellness initiatives in this context. We sought to understand the state of resident wellbeing in rural family medicine training settings using a critical realist lens.

Methods: We applied a critical realist inquiry lens to all aspects of our study. We used a sequential explanatory mixed methods design to explain wellbeing (including concerns and coping strategies) among rural family residents) and the role of preceptors in resident wellbeing across the University of Calgary and University of Alberta distributed learning programs of rural family medicine.

Results: A total of N= 27 rural family residents participated in an online survey and n=7 residents and n=7 preceptors participated in semi-structured interviews. Frequent stress and burnout remained a concern for over one-third of residents. Community building and participation was reported as integral to maintaining wellness for residents, with preceptors leveraging mentoring relationships as a way to support resident wellness. Resident wellness differed based current training location, with training at rural satellite sites increasing isolation and decreasing access and availability to wellness support.

Discussion: Preceptors are vital members of the learner's academic, professional, and personal community. The lack of knowledge on available program supports may diminish their effectiveness as mentors and sources of support for learners. Formal and informal supports available to trainees may enhance learner experiences and wellness while on rural placement by considering context(s), mechanism(s) and outcome(s) assist in wellness initiatives.

PME-91 Closing an education gap: evaluating attitudes towards novel postgraduate communication skills emodule training to enhance serious illness conversation skills

Helen James, University of Toronto

Background/Purpose: Background: Serious illness conversations (SICs) are essential to meet the needs of seriously ill people, but most clinicians receive little SIC training. To address this gap, we developed two online modules for busy clinician teachers that merge high-yield skills from the two most evidence-based North American SIC programs that deliver standardized, time-efficient, and structured asynchronous training. This study assessed attitudes towards, and use of, the novel modules.

Methods: Methods: An online survey was emailed to Family Medicine and Palliative Care postgraduates and faculty at two teaching sites with existing SIC curricula to assess post-viewing attitudes and perceptions towards the newly created modules. Postgraduate respondents completed a 1-month follow-up survey to report skill adoption and iterative use of the modules.

Results: Results: Survey completion rate was 38% (19/50) for postgraduates and 22% (13/60) for faculty. Almost all participants agreed that the modules provided valuable core communication skills training, was a useful addition to existing teaching methods and would recommend the modules to others. Post-viewing, postgraduates felt more confident to empathetically support patients and lead SICs. Most residents used the SIC skills in their clinical practice and some revisited the modules after 1 month. Video demonstrations were identified as the most useful teaching method by both faculty and trainees.

Discussion: Discussion: Scalable teaching methods are urgently needed to address a serious illness training gap. Two novel online learning modules introduce foundational evidence-informed skills that can be easily incorporated by any institution into new or existing curricula and may improve SIC quality and health care.

PME-92 <u>Culinary Medicine for Health Professionals: Build</u> It, They Will Come

Lee Rysdale, Northern Ontario School of Medicine University

Background/Purpose: Furthering a CCME 2022 Think Tank on Culinary Medicine (CM), an innovative model to address deficits in nutrition training across the medical education continuum, a registered dietitian (RD) and physician group piloted an in-person CM experience at a national cardiovascular conference.

Methods: The 60-minute session was limited to 25 preregistrants, another 25 were waitlisted. Facilitated by an RD/Chef, RD and family physician moderator, a pop-up teaching kitchen was established in a hotel conference room. Participants prepared 12 recipes; enjoyed a familystyle meal and explored nutrition behavior change strategies for patients. Using Likert-scaled and openended questions, pre/post online surveys assessed change in nutrition counselling skills, attitudes, and confidence; post-survey also assessed effectiveness of session components and further training needs.

Results: Pre-survey response rate was 72%. Event day, 21 attended (14 pre-registrants, six from waitlist, five dropins). The majority (17/21) completed the post-survey. All components enhanced nutrition competence; highest ranked (1 to 5) were key patient messages and shared meal (mean 4.59), recipes (mean 4.53) followed by nutrition concepts (mean 4.47) and group discussion (mean 4.29). Together with reporting planned practice changes, further training needs included additional/similar sessions.

Discussion: Along with dietary recommendations, promoting healthy eating behaviours requires understanding the complexity of food literacy, including food skills. Experiential teaching kitchens support the development and adoption of real-life food skills, enhance confidence to discuss nutrition with patients, and improve efficacy as practitioners in addressing chronic disease prevention and management. High physician interest along with robust evaluations, CM is a promising strategy in Canadian medical education.

PME-93 What factors influence future International Medical Graduate success in the USMLE Step 1 Examination?

Clare Conway, University of Limerick School of Medicine

Background/Purpose: Many future IMGs applying to CaRMs also consider US residency and spend significant time studying for the USMLE. It is important to paint an authentic picture of the challenges these medical students face in conquering the USMLE Step 1 exam. Timely learner insights can help medical schools to predict and support positive outcomes. Evidence is needed to achieve better understanding of resource needs and modifiable risks involved in the preparatory process from the student perspective.

Methods: A voluntary, online survey (Ethics approved) circulated to all current International BMBS students and graduates (n= 180) engaging with the USMLE Step 1 at the University of Limerick School of Medicine. Population range: Age 21-45 with a 60:40 female: male ratio, diverse in nationality and ethnicity. Anonymised, mixed data collection (Yes/No responses, Likert rating scales and commentary) for quantitative and qualitative review, evaluation and descriptive summary.

Results: Full Results Pending - Nov 2023: Pilot data suggests positive associations between Step 1 success and a high level of engagement with preparatory course materials and workshops, also with strong BMBS academic performance. Both a diagnostic exam score >60% and timing of this mock (< 6-month gap) appear to improve pass rates. BMBS curricular demands and personal stressors (financial, accommodation, lack of peer support) may negatively impact upon performance.

Discussion: This research will influence school USMLE policy development and will have implications for all international medical schools who wish to offer equivalent support and solutions.

PME-94 Role models performing acts of magic on clinical wards

Jinelle Ramlackhansingh, Memorial University

Background/Purpose: Physicians working in clinical environments can act as role models for medical students. Role modelling is an educational space which can have a powerful impact on students developing professional identity. Role modelling can help teach about the "soft skills" needed to be a good doctor.

Methods: This work was part of a larger critical ethnography done at one Canadian medical school. Regular focus groups were done with students. Interviews with faculty members and administrative staff were completed. The theories of Foucault and Bourdieu were used in data analysis.

Results: The students spoke about their experiences viewing physicians interacting with patients. The students commented that physicians were able to speak to and manage "complex patients" with "super complex problems". One student commented that a physician, "worked her magic in the end", allowing a patient the time to understand and agree to their management plan.

Discussion: Students have the opportunity to view physicians as positive role models in patient care. The students viewed physicians treating patients with respect, compassion and care. In Bourdieusian terms, the magic the student referred to can be considered symbolic capital. This symbolic capital reifies learning about abstract concepts like advocacy, communication, and being a professional. Gaining this symbolic capital can help students embody the predispositions of body language and ways of speaking to patients, which can ultimately impact their own development as a professional. Role modeling is thus an educational space that can teach students how to be empathetic and humanistic doctors.

PME-95 <u>Crisis to catalyst? Reflecting on experiences of</u> redeployment during COVID-19 pandemic.

Melanie Hammond, University of Toronto

Background/Purpose: Studies exploring professional identity development in medical residents have highlighted moments of both practical and ceremonial importance. Our study explores the experience of professional identity development during moments of social crisis. We focus on resident identity development during the COVID-19 pandemic, specifically as it relates to organizational strategies of redeployment, where residents were redeployed to fill service gaps.

Methods: 15 semi-structured interviews were conducted and analysed iteratively. Analysis was informed by theories of identity development. Study participants included residents from pathology, anesthesia, emergency medicine, OBGYN, ophthalmology, psychiatry, and surgery.

Results: Redeployment as response to crisis elevated long-standing tensions between service and learning. Through our interviews, we also found: perceptions of the role of 'the skilled doctor' as using generalist or specialist knowledge "[PGY1s] were representing our [specialty] department ... because we were the most, in a way, capable." (P3); Reflections related to the experiences of navigating traumatic circumstances as a learner within the broader medical education system: "you just like, don't really ever process this stuff. You sort of, just, keep moving (P1); and questions around the social contract in which residents felt themselves embedded, "we moved through the gratitude to healthcare workers space and into the mistrust of vaccines and mistrust of treatments, and starting to have mistrust of the medical system also." (P13)

Discussion: While our study focused on redeployment during COVID-19 pandemic, findings around flexibility, identity development, and social trust are salient for any future crisis to which the profession of medicine will respond.

PME-96 Imposter Syndrome among IMGs: Rooted in Barriers

Adri-Anna Aloia, University of Manitoba

Background/Purpose: Though medicine has evolved, the culture of utilization of systematic barriers still persist to perpetuate a protected exclusivity which is the practice of medicine in Canada, despite patient demographic demands. The work herein aims to unveil these barriers to address: how might we improve Internationally Trained Physician (ITP) competency with respect to experience within a Canadian health system, exposure to varied clinical cases and experience in facilitating trust with various groups representative of the diverse, metropolitan and rural populations?

Methods: Through the collection of observational data from various meetings and table talks whereby the Foundation of IMG sat as representatives of IMGs along with other organizations across Canada, notes, literature archives and up to date publicly viewable policies and candidate criteria relevant to the IMG journey were used for context and organization of a visual systems representation.

Results: Within the systems web display, notable and labeled elements included unique aspects of an individual IMG, the items which hold financial strain on the business model, the items which have potential legal implications or are associated with political positions which influence the outcome of that factor and areas which serve as pain points from the perspective of an eligible IMG.

Discussion: This information provides insight into the extended medical system, which includes IMG candidates. The lack of appropriate IMG opportunity for orientation to the Canadian health system, functionally, hinders their integration within this system and thus hinders their success in being able to contribute positively to its enduser, the patients', needs.

PME-97 Development and implementation of a medical student-led initiative to identify problematic content in medical school educational materials

Catherine Mitran, University of Alberta

Background/Purpose: Awareness of the importance of EDI principles in medical education is increasing. Much work in this area has focused on admission processes and curricular content. A less-explored area of EDI in medical education is the contributions that learners can make to the curriculum. At our medical school, we developed a way for students to identify and report concerns about educational content that is problematic from an EDI perspective.

Methods: Our student-driven Anonymous EDI Reporting Form provides an opportunity for students to report inaccurate, offensive, outdated, or oppressive material within the MD Program curriculum. Student responses are collected via an online form, these reports are then summarized by student representatives and provided to program faculty responsible for reviewing courses in our program.

Results: Our form has collected reports on a variety of topics, including race, ethnicity, gender, sexual orientation, body habitus, income status, disability, and other identity-related factors. Faculty integrate our summary reports into their curricular content evaluation report and recommendations for change are made for implementation in the next program year.

Discussion: By allowing students from diverse backgrounds — who are experts in their own lived experiences — to actively engage in identifying harmful or oppressive material, this initiative ensures curriculum is revised with the safety of equity-deserving and historically marginalized learners and communities in mind. Its results will continue to be reviewed with regard to improvements in students' learning experience, quality of educational material, and effects on culture within medical pedagogy.

PME-98 Residency Match Challenges: An Analysis of Unmatched Ophthalmology Applicants in Canada

Mostafa Bondok, University of British Columbia

Background/Purpose: Applicants to ophthalmology have high rates of going unmatched during the Canadian Resident Matching Service (CaRMS) process, but how this compares to other competitive or surgical specialties remains unclear. Our research aims to examine this phenomenon by identifying trends and comparing match data with other specialties, to identify disparities that may inform the need for future interventions to improve the match process for applicants.

Methods: We used a cross-sectional analysis of data provided by CaRMS on the residency match from 2013 to 2022.

Results: We obtained data from 608 ophthalmology, 5,153 surgery, and 3,092 top five (most competitive) specialty first choice applicants from 2013-2022. Ophthalmology applicants were more likely to go unmatched (18.9% [120/608]) than applicants to the top five (11.9% [371/3,092]) and surgical (13.5% [702/5,153]) specialties (p<0.001) and were twice as likely to rank no alternate disciplines (31.8%, p<0.001) over the study period. In the first iteration, when alternate disciplines were ranked, the match rate to alternate disciplines was highest for ophthalmology applicants (0.41, p<0.001). The majority (57.8%) of unmatched ophthalmology applicants do not participate in the second iteration.

Discussion: Compared to other competitive specialties, first choice ophthalmology applicants were more likely to go unmatched, rank no alternate disciplines, and choose not to participate in the second iteration. Ophthalmology applicant behaviours should be further studied to help explain these study findings.

PME-99 <u>Assessing workplace bias towards Internationally Trained Health Professionals and its impact on resilience and wellness:</u> A needs assessment study.

Rachel Antinucci

Background/Purpose: Health Force Ontario (2020) shows a changing landscape with more than 10% of our workforce consisting of Internationally Educated Health Professionals (IEHP). As more IEHPs join the Canadian healthcare workforce, the potential for experiencing discrimination increases. The goal of this project is to conduct a needs assessment of IEHP nurses and physicians to gather information on experiences of discrimination.

Methods: This project uses structural-level theories of discrimination to understand the contemporary patterns of racism and anti-immigrant sentiment in a Canadian context. We conducted semi-structured interviews with 13 IEHPs (8 nurses, 5 physicians) over WebEx. All interviews were audio-recorded and transcribed. Thematic analysis of interviews using the Braun and Clarke (2006) approach is currently underway.

Results: A prequel study was completed with 20 International Medical Graduates concluding that they were in need of wellness supports, networking, mentorship, and increased support around discrimination and micro-aggressions. Early findings from this study emphasize the different experiences of transitioning and working in the Canadian healthcare setting between nurses compared to physicians, possibly due to differences in occupational status. However, both nurses and physicians have highlighted the need for change in the transition process and the opportunity for educational advancements addressing discrimination in the workplace.

Discussion: The aim of this project is to identify the need for continuing professional development (CPD) training to address these issues. There is an urgent need to create CPD curricula to address these biases, discrimination and racism in order to create culturally safe work environments for an increasing number of IEHPs in healthcare settings.

PME-100 Measuring Socially Desirable Constructs: Enhancing Diversity, Equity, Inclusion, and Accessibility (EDIA) in Health Professions Education Beyond Likert or Rank Order Scales

Cassandra Barber, Maastricht University

Background/Purpose: The assessment of socially desirable constructs such as EDIA is of paramount importance. This study addresses the limitations of conventional Likert and rank order survey scales in capturing the nuanced and multidimensional nature of EDIA. Acknowledging the pressing need to assess foundational competencies of EDIA in health professions education, this study adapts an innovative measurement approach.

Methods: Rather than relying on Likert or rank order scales, this study employs Goal Attainment Scaling (GAS) as a novel methodological approach to assess EDIA in health professions education. GAS allows for a more finegrained and context-sensitive evaluation, aligning with the intricacies of socially desirable constructs. This research design integrates GAS into an online survey, encouraging respondents to reflect upon their clinical practice and evaluate where their baseline competencies related to EDIA and identify areas for continued professional development (CPD).

Results: The utilization of GAS reveals significant advantages in measuring EDIA. Unlike traditional Likert and rank order survey scales, GAS accounts for the depth and breadth of EDIA competencies. This enhanced measurement sensitivity is vital in capturing the complexity of EDIA. Findings suggest that GAS provides more meaningful insights into respondents' self-assessment, over traditional survey scales.

Discussion: Overall, this study supports the feasibility and utility in adopting GAS as a valuable tool for assessing EDIA. The ability to better capture socially desirable constructs enables researchers and educators with a tool to better assess competencies and interventions more effectively. This research underscores the importance of evolving measurement techniques to address the complex challenges associated with EDIA.

PME-101 Implementation of a Clinical Faculty Mentorship
Program: Lessons learned form 2021 and 2023 in
Implementation interventions to improve optimization

Laura Foxcroft, Western University

Background/Purpose: A clinical faculty mentorship policy was developed in 2010. It stated that every physician is offered a faculty mentorship committee at time of hire. Committees are comprised of a faculty member from the mentee's home department and a faculty member from another clinical department. Operationalization of the policy over ten years was variable.

Methods: The survey was repeated 2 years after implementing four interventions to improve operationalization of the mentorship program. Questions pertained to program support, processes, document usage, and diversity of mentors. 41% of departments (as compared to 10%) had mechanisms in place to increase diversity of mentors. Consistency improved through increased training completion (71% vs. 30%); use of templates (53% vs. 30%), and centralized list of mentorship committee members (71% vs. 50%). Importantly, use of centralized materials was higher and departments reported support resources comprehensive.

Results: Establishing a policy on Faculty Mentorship in a large academic institution is not enough. Implementing and operationalizing a policy that impacts physician wellbeing in a robust fashion takes time and deliberate effort. Training faculty regarding the value and process of mentorship is an enabler. Standardized templates for recording mentorship meetings facilitates important communication between faculty and their leaders.

Discussion: Having a local university policy for academic promotion is a key driver to motivate faculty to engage with the mentorship process. Having a standardized mentorship process that is equitable for all faculty in every clinical department with an EDID sensitive lens is important. The cross departmental nature of this program fosters interdisciplinary collaboration. This cross departmental approach, in turn, fosters institutional culture change.

PME-102 <u>Trends in primary fetal cardiomyopathy:</u> diagnoses, outcomes and genetic etiologies

Astha Burande, University of Alberta

Background/Purpose: Fetal cardiomyopathy (FCM) affects 8.24 per 100,000 live births, with 50%-82% neonatal mortality. Around 50% are idiopathic and 30% have extra-cardiac anomalies. The last decade has seen significant progress in fetal cardiac screening, genetic testing, and perinatal management.

Methods: Retrospective study conducted over a 5-year period (Jan 2017 - Dec 2021) of cases diagnosed with primary FCM in our program. The fetal database, echo reports, fetal and postnatal charts were reviewed.

Results: Fifteen primary FCM were diagnosed at mean gestational age of 24+4 weeks. Subtypes were: 33% (5/15) non-compaction (NCM), 27% (4/15) restrictive (RCM), 20% (3/15) dilated (DCM), 13% (2/15) mixed (MCM), and 7% (1/15) left ventricular (LV) aneurysm. Extra-cardiac diagnoses: 33% (5/15) prenatally and 77% postnatally/at postmortem (77% p=0.03). 87% (13/15) underwent genetic testing - 60% (9/15) had likely/confirmed genetic etiology. Termination in 13% (2/15), intrauterine fetal death in 13% (2/15) and 73% (11/15) had live birth. At diagnosis, 14% (2/15) had hydrops, increasing to 40% (6/15) by delivery. 1-year survival was 55% (6/11): 100% (2/2) for MCM, 50% (2/4) for NCM, 50% (1/2) for RCM (25%), 50% (1/2) for DCM, and 0% (0/1) for LV aneurysm. 18% (2/11) used extracorporeal membrane oxygenation, 17% (3/11) had ventricular assist device and cardiac transplantation performed in 67% (2/3) of those listed.

Discussion: Extra-cardiac diagnoses often accompany FCM, especially postnatally. Most FCM are associated with an identifiable confirmed/likely genetic etiology. Outcomes vary by subtype.

PME-103 <u>"It's those biases and assumptions": An Intersectional Exploration of Experiences of Inclusion and Exclusion in Residency Training Programs</u>

Justin Lam, University of Toronto

Background/Purpose: Although postgraduate medical education programs across North America have committed increasing resources to equity, diversity, and inclusion (EDI) issues, learning environment inequities persist. Identifying mechanisms contributing to ongoing discrimination is critical for ensuring alignment between institutional priorities, learner experiences, and patient care. We undertook a qualitative project exploring resident experiences of inclusion, exclusion, and discrimination in paediatrics, neurosurgery, and plastic surgery residency training programs.

Methods: Participants were recruited using purposive and snowball sampling. We conducted semi-structured interviews that explored participant identities and their relevance to training experiences. Intersectionality theory was applied analytically to examine how training experiences related to social and professional identities and to appreciate how discrimination extended beyond racism and occurred along multiple identity axes.

Results: 13 participants were interviewed. Participants focused on exclusion over inclusion experiences, and shared how their non-dominant identities related to the former. Exclusion experiences could be mechanistically explained by systemic or aversive discrimination. At the systemic level, participants shared how exclusion experiences stemmed the operationalization of implicit assumptions into default practices grounded in a Eurocentric medical culture through scheduling and social events. Aversive discrimination resulted from implicit bias operationalized as unintentional microaggressions, in group favouritism leading to exclusion from dominant social groups, and misalignment between resident experiences and programs' formal EDI commitments. Many participants reported that their marginalized identities advantaged them in caring for patients with similar identities.

Discussion: Systemic and aversive discrimination mechanistically account for trainee discrimination experiences. Addressing these mechanisms are important for improving equity and inclusion in learning environments.

PME-104 The Empowerment Project: A Curriculum Change Initiative to Shape Medical Education.

Parmis Vafapour, Queen Mary University

Background/Purpose: Various forms of discrimination and lack of inclusivity persist throughout the National Health Service (NHS) despite efforts to improve diversity within the system. Initiating change at an undergraduate level in medical education is critical to creating meaningful changes in the future. The Empowerment Project (TEP) has embedded a 'Three Step Plan' at Queen Mary University to promote critical pedagogy, diversity and inclusivity whilst instilling confidence in students to be ambassadors of change.

Methods: A mixed-methods research approach has been employed to understand the impact of TEP's Three Step Plan. Step 1 provides Active Bystander Training curated for healthcare students. Step 2 involves a lecture addressing the gender data gap and bias in medicine. Step 3 encourages open dialogue between faculty and students on sociopolitical issues in the NHS. The quantitative arm involves pre- and post-participation questionnaires immediately and 3 months after to capture shifts in students' attitudes and confidence after engaging with TEP. In tandem, qualitative insights will be achieved through semi-structured interviews to explore TEP's impact on the student experience.

Results: The study is ongoing, with expected positive impacts on students' confidence and behaviours. Quantitative data will be analysed using descriptive and inferential statistics, including the paired T test, whilst qualitative data will undergo thematic analysis. The study is expected to span three years.

Discussion: TEP's mission is to instill confidence, promote critical pedagogy and advocate for inclusivity within medical education. Currently we have received positive feedback on our initiative and are continuing to work towards fostering an empowered generation of doctors.

PME-105 La maternié adolescente

Schneider Benoit, Université de la fondation **Dr Aristide**, UNIFA

Background/Purpose: Cette étude de recherche est importante parce que la maternité adolescente est classée comme un problème de santé publique majeur par l'organisation mondiale de la santé.

Methods: L'étude a été menée à travers une enquête qualitative que nous avons été menée en Haïti en 2020, Notre travail quand à lui a considéré l'ensemble des femmes âgées de 15 à 45 ans, un tel choix à permis d'étudier l'aspect générationnel de ce phénomène à Haïti.

Results: Les résultats ont montré que les femmes Haïtiennes en âge de procréer plus particulièrement les adolescentes et les jeunes adultes évoluent dans un environnement scio économique très vulnérable, par ailleurs les données indiquent que très peu de femmes âgées de 15 à 49 ans ont de bonne connaissance sur le cycle ovulatiore et sont exposées à des messages relatifs à la sexualité par le biais des médias , sous l'effet de la modernisation et de l'urbanisation les normes de comportement sexuels sont en constante évolution. Les propos recueillis lors des entretiens réalisés ont montré que la maternité adolescente est de plus en plus perçue comme un acte socialement déviant .

Discussion: L'importance des résultats nous permet de savoir la proportion des femmes qui s'engagent dans des relations sexuelles à l'adolescence ne cesse d'augmenter. De plus cette sexualité est de plus en plus précoce et à haut risque, car la pratique contraceptive est très fiable.

PME-106 Ethics before medicine: Exploring ethical knowledge and education in Canadian pre-medical students.

Taylor Nimchonok, University of Manitoba

Background/Purpose: Ethics play an important role in medicine. Canadian medical students and physicians must be able to navigate a host of ethical dilemmas that arise in practice, as they hold authority in decision-making (Gaucher et al. 2013; Monteverde 2016). Each year, premedical students go through an admissions process set by the various colleges in Canada with the hope of gaining admission to a Medical Doctor program. Medicine admission requirements often shape the pre-medical students' choices, experiences, and knowledge base as they prepare to apply to medicine. This can have implications for the individuals accepted as future physicians and how medical colleges approach the education of these individuals. Objectives of the study were to better understand participant ethical knowledge, the motivation to learn about ethics, how participants chose to learn and what specific aspects of the admissions process pose perceived barriers to accessing ethical knowledge and education.

Methods: In this study, nine pre-medical students participated in semi-structured interviews focused on their knowledge and education in ethics. Responses were analysed using a ground theory approach which through systematic coding of data allowed findings to emerge inductively.

Results: This study found participants were able to define ethics, were motivated by CASPer and the pre-medical community to learn about ethics and preferred a case-based approach to prepare for the admissions process. However, a lack of time and the need to prioritise other admission requirements were perceived barriers.

Discussion: Implications for the admissions process and future ethics education in medical school are discussed.

PME-107 <u>Through a Tainted Lens: Who do learners choose</u> to advocate for and why?

Ian Scott, University of Manitoba

Background/Purpose: Health advocacy has been promoted as a means to remedy inequities in health yet it is not clear how learners decide when and for/with whom to advocate. Previous studies suggest that learners may distribute advocacy based on which patients "deserve" their efforts. By understanding how learners determine this patient deservingness, we may be able to equip our curriculum and learners to support equity.

Methods: This study employed qualitative methods. Interviews were conducted with 29 undergraduate and postgraduate medical learners from a variety of contexts. Learners discussed how they made decisions about advocacy. Data were analyzed concurrently using thematic analysis.

Results: Learners often invoked a judgment about patient deservingness when deciding where to direct their advocacy efforts. "Deservingness" reflected their perceptions of the patient's need for advocacy, attitude toward health professionals, their effort/reciprocity in addressing their health issues, patient control or responsibility over their condition, and whether the learner identified with their patient. Some learners reflected on the problem of using their perceptions, but few had formed plans to remedy these problems.

Discussion: Although health advocacy is an expected component of medical practice, learners often assess patient deservingness in ways that may reflect their own biases more than patient and community needs and this may actually perpetuate health inequity. Learners' awareness of the potential biases associated with their distribution of advocacy suggests an interest in reflecting on and redistributing their advocacy efforts. With educator support, learners may be better able to facilitate the equitable distribution of their advocacy efforts.

PME-108 When Memory Transforms': Co-constructing Memory Boxes as Architectures of Counter Remembrance for 2nd & 3rd-generation Refugee Young Adults

Vivetha Thambinathan, Western University

Background/Purpose: How do we inherit the pain of events we have not experienced ourselves? How can we heal and put an end to our generational trauma? This interdisciplinary arts-based participatory action health research project aims to study historical trauma and intergenerational healing. Though Canada offers refugees the possibility of a better life, displaced persons often bring with them traumas that affect their future generations.1,2 This is true for Tamil communities in Canada, most of whom fled a brutal 26-yearlong armed conflict in Sri Lanka only to now struggle with spiking suicide rates among their youth.

Methods: This project employs a multilayered theory of 'historical trauma', amalgamated by two pre-existing constructs: historical oppression and psychological trauma.6-8 Drawing on a decolonizing theoretical framework9,10, and working in partnership with Tamil refugee young adults in Ontario, two questions were addressed: a) What are 2nd & 3rd-generation Toronto Tamil refugee young adults' memories and postmemories, growing up amidst the genocide in Sri Lanka? and b) What are the collective threads related to historical trauma and intergenerational healing within and across the refugee young adults' memory box narratives? Participants were asked to construct memory boxes with cultural artifacts, including photographs, objects—representative of memories/postmemories concerning growing up amidst historical and current events in Sri Lanka.

Results: Using historical image-based narrative analysis, along with reflexive voice memos and conceptual mapping, five collective threads were identified: (1) intergenerational memories remember joy as a form of resistance; (2) transmission of postmemories: fragmented, evolving temporality; (3) legacies of state violence: the army, forced displacement, & erasure of Tamils; (4) growing up with community knowledge and activism; (5) ally or comrade?: feelings of disconnect and diaspora guilt.

Discussion: These findings have implications for how memory boxes can be used as an evocative visual research method and how intergenerational communities can use memories to heal and counter remember. Physicians and health professions have a lot to learn from co-created projects like these. After all, communities know their needs best.

PME-109 Self as informatician: The argument for a new CanMEDs Role that augments practice with savvy integration of technology

Eleftherios Soleas, Queen's University

Background/Purpose: The rapid rise of artificial intelligence (AI) has transformed society with similar promise for electronic health records and simulation technologies (e.g., augmented reality), yet the education of healthcare providers in using these emergent technologies lags behind. This abstract explores the challenges and promises of these emergent technologies through the lens of a new role in which health professionals will have to develop competency-informatician.

Methods: We explore the hurdles and imperative of creating educational programming designed specifically to support healthcare professionals as they work to supplement their practice with AI and augmented technologies. We will review literature, pedagogies, and existing roles within the CanMEDS framework to identify the key competencies and behaviours of physicians who are able to augment themselves, their teams, and their practice through savvy use of technology.

Results: We will advocate for a new role of healthcare professionals- both compassionate practitioner and informatician. We will demonstrate how interdisciplinary collaboration, ongoing education, and incentives are ideally positioned to ensure healthcare stays aligned with technology's trajectory.

Discussion: The recurring trend of technology outpacing education necessitates a proactive approach to bridging the gap. Initiatives like the Royal College's white paper provide a roadmap, but sustained efforts such as rigorously built CPD micro-credentials and advanced education are required to ensure that healthcare professionals are not left behind. The challenge is clear, and the time to act is now.

PME-110 Analyzing Gender Differences in Match Rate to Surgical Specialties in Canada: A Retrospective Study from 2003-2022

Mostafa Bondok, University of British Columbia

Background/Purpose: While women are known to be under-represented in certain surgical specialties in Canada, how this compares between specialties, trends across time, and whether this is due to differences in match rate by gender or a lesser number of women applicants has not been delineated. This study assesses gender-based differences in surgical specialty match outcomes.

Methods: Data was extracted from the Canadian Resident Matching Service (CaRMS) reports.

Results: A total of 9,488 applicants ranked surgical specialties as their first choice from 2003-2022. Increases in the proportion of women applicants comparing periods 2003-2007 to 2018-2022 were significant for cardiac surgery (22% to 43%, p=0.03), general surgery (46% to 60%, p<0.001), orthopedic surgery (23% to 35%, p<0.001), urology (23% to 38%, p<0.001), and all aggregated surgical specialties ('all surgery') (45% to 55%, p<0.001). An increase in the proportion of women applicants who matched over the same periods was observed for general surgery (+47% to 60%, p<0.001), orthopedic surgery (24%) to 35%, p<0.01), urology (21% to 34%, p<0.001), and all surgery (46% to 54%, p<0.001). From 2003-2022, a lower match rate for women compared to men was observed for otolaryngology (0.60 v 0.69, p=0.008), urology (0.61 v 0.72, p=0.003), and all surgery (0.71 v 0.73, p=0.038), while higher match rates were observed for ophthalmology (0.65 v 0.58, p=0.04).

Discussion: While the number of women applicants to surgical specialties in Canada has increased in recent years, differences in match rate by gender remain. Further research to understand and address these differences is needed.

PME-111 Analysis of Sex and Gender Language Use in a Pre-clerkship Medical Curriculum

Jennifer Egan, University of Manitoba

Background/Purpose: Historically, sex and gender terms have been conflated, and commonly still are in formal literature, and conversationally. Delivering optimized healthcare requires that physicians understand current sex and gender terminology and recognize sex and gender impacts on health. This study assesses whether our curriculum's language aligns with current terminology, and whether sex and gender influences are discussed in topics with existing evidence.

Methods: Course and session learning objectives from the pre-clerkship medical curriculum at the University of Manitoba (U of M) were mapped for sex and gender terms in the 2022/23 academic year. The identified terms were assessed for occurrence and proper usage.

Results: It was found that most sex and gender terms were identified in topics directly related to reproduction and sexual development, and that sex terms were used correctly more often than gender terms (100% and 42.5% respectively). The few sessions that emphasized the importance of differentiating sex and gender in medicine for patient health, were found near the end of the preclerkship curriculum, and those concepts did not appear to be integrated into earlier content.

Discussion: When sex and gender concepts in medicine are presented in the U of M curriculum, associated terminology is most often used appropriately. However, despite the growing knowledge about the influence of sex and gender on health and disease, and the evolving societal views of sex and gender, these topics remain relatively isolated to reproductive courses and lack emphasis in other courses throughout the curriculum.

PME-112 <u>Homogenized and Stigmatized: A Discourse</u> Analysis of Asian Sub-ethnic Medical School Aspirants

Salman Choudhry, Western University

Background/Purpose: Despite progress to support equity-deserving groups in medical school admissions, scarce research has been conducted on the unique challenges encountered by Asian sub-ethnic groups, even though evidence indicates that students from these communities often face discrimination in higher education. We explored how Asian sub-ethnic identity influences the experiences of pre-medical students in the United States and Canada.

Methods: Using key phrases, we searched online forums: Reddit (r/premed, r/premedcanada), Premed101, and StudentDoctorNet for threads related to Asian identity. We performed cyclical inductive coding, identifying key domains through content analysis, followed by critical discourse analysis to examine the impact of language on the social context of Asian sub-ethnic identity and medical school aspiration.

Results: We coded 132 discussion threads (June 2018-June 2023) across all forums. Our content analysis yielded two major domains of discussion: 1. Homogenization of diverse Asian sub-ethnicities. Language was used to devalue individual identity with prominent reference to all Asian sub-ethnic individuals as 'over-represented minorities', or 'ORM'. These terms perpetuated the idea of uniformity amongst all Asian communities. 2. External pressure related to ethnocultural values. Cultural reverence of physicianship was conveyed through hyperbole ("Doctors are like Gods") and the term "Asian Parents" was used as an analogy to larger Asian cultural expectations, often through humor (jokes, memes), reinforcing the link between Asian sub-ethnicity and external expectations.

Discussion: Diversity of Asian sub-ethnic communities is undervalued in medical education. Homogenization must be dismantled to avoid diminishing individual identity and to reduce the threat to workforce diversity.

PME-113 Joining the dots: mapping patterns of feedback in medical education

Catherine Patocka, University of Calgary

Background/Purpose: Although feedback is acknowledged as an essential part of improving performance, what it involves and what it achieves can vary. We recently developed a pattern system of feedback to examine how divergent approaches to and practices of 'feedback' can be related. This pattern system contains 36 abstract patterns that can collectively represent the many practices and philosophies of feedback in medical education.

Methods: The next step was to explore how different or similar current models of feedback are and attempt to outline a pattern language of feedback by identifying various syntaxes of feedback (how different elements of the pattern system are combined). Using our pattern system, we conducted a comparative case analysis of different feedback models from the medical education literature. We adopted a critical realist and hermeneutic theoretical stance and used framework analysis to organize and analyze our data.

Results: We analyzed 11 feedback models (4 coaching models, 3 audit and feedback models, 3 multisource feedback models, and 1 model of feedback intervention). No models of augmented sensorimotor feedback were identified. Five conceptual issues became apparent through our analysis and discussion: diverging syntaxes of feedback, diverging pattern expressions, varied pattern expressions, syntactic regularities, and syntaxes of absence.

Discussion: There were unexpected variations in the way that feedback was conceptualized across models and categories of feedback. Despite this, we were able to outline a few candidate syntaxes of feedback. Examination of these syntaxes will be a critical step in evolving our pattern system into a pattern language of feedback for medical education.

PME-114 Exploring and Understanding the Needs of the Caregivers of People Living with Dementia (PLWD) from Diverse Populations in Urban and Rural Areas of Quebec

Sarah Aboushawareb, McGill University

Background/Purpose: Little is known about the needs of caregivers of PLWD with only two studies that explored those needs in Canada in 2008 and 2012. In addition, the existing research lacks the use of validated surveys and does not explore domains such as gender and race which affects caregiving. Accordingly, the aim of our work is to explore and understand the needs of the caregivers of PLWD from diverse populations in Quebec to inform the design and content of online educational modules for the caregivers.

Methods: Sequential explanatory mixed methods. In the quantitative phase, a validated needs assessment survey is distributed to the caregivers, and the data collected will be analyzed using descriptive statistics and used in the next phase. All outcomes will be stratified by gender, age, race, and geographical location. In the qualitative phase, the results will be discussed in focus groups with caregivers and thematic analysis of the transcripts will be conducted to validate and clarify the collected quantitative data. Integration will happen at the stage of interpretation, reporting, and integration of the results into educational modules.

Results: Anticipated Results: The outcome measures for the quantitative phase: caregiving related to physical/nursing care, household work, supervision, coordination, receiving formal services, housing/transport, costs, personal health, family relationships, and planning for crises, and future. For the qualitative phase: Major themes related to caregiving.

Discussion: The results of this work will allow for the creation of educational modules that are tailored to the needs of the caregivers of PLWD in Quebec.

PME-115 Redefining Excellence in Healthcare: Uniting Inclusive Compassion and Shared Humanity within a Transformative Physician Competency Model

Kannin Osei-Tutu, University of Calgary

Background/Purpose: The Canadian Medical Directives for Specialists (CanMEDS) is a physician competency framework of global importance. Presently, a revision project is underway. Multiple expert working groups (EWGs) have convened to contemplate a new path forward. The current framework, despite being celebrated as the gold standard in medical education and practice, may fall short in its ability to adequately address the diverse needs of the Canadian population and possibly those of other countries as well. Can the framework be improved to meet the changing needs of the 21st century physician and the communities we serve? Does is need to be tweak or fundamentally reimagined? With the CanMEDS revision project before us, we now have the extraordinary chance to engage in critical thinking and envision a future practice of medicine deeply rooted in concepts such as social justice, cultural safety, anti-racism, and anti-oppression—a cultural shift that is imperative within the medical profession in Canada. Transformation rather than evolution is daunting and challenging. It demands stakeholders to conceptualize bold visions that resonate with others.

Methods: In this oral session, I present one such vision of a way forward — a transformed CanMEDS physician competency framework calling for a shift in the neutral physician identity towards an action-oriented approach committed to equity and justice for all.

Results: A new conceptual model.

Discussion: I unveil this framework and explain my vision. It is a vision that places inclusive compassion and shared humanity at the heart of transformative healthcare.

PME-116 <u>Bringing in the New Year 1: Reflections on the Year 1 expansion to Regina Campus</u>

Helen Chang, University of Saskatchewan

Background/Purpose: Our Regina Campus is a distributed site for the University of Saskatchewan, College of Medicine. In August 2022, we transitioned to a full four-year program, bringing in our first-ever class of Year 1 students. This occurred after more than two years of detailed planning, the issues presented by Covid-19, challenges with staff turnover, and in the midst of curriculum renewal.

Methods: In order to find out what worked (and what didn't), we asked local campus leadership, administrative and program staff to reflect on the transition process and the first year of the new program at our distributed site. Participants were invited to respond to open-ended questions on surveymonkey through an email link. We followed up with staff who had since left the College of Medicine, in order to obtain a more complete picture of the transition process.

Results: The study is pending, but in our presentation, we hope to share our qualitative data with the group.

Discussion: We would like to engage participants in discussing how our experience might apply to other programs looking at a transition of preclerkship programming to distributed sites.

PME-117 What to learn and what to teach about interactions with parents during simulated neonatal resuscitation

Claude Julie Bourque, Université de Montréal

Background/Purpose: Since 2019 we have developed new ideas to answer training needs for the improvement of non technical skills and team performance during acute events in neonatology. As there are no robust empirical results to guide trainers on how teach and evaluate interactions with parents during resuscitation, we did an international scoping review.

Methods: We based our protocol on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review (PRISMA-ScR) and searched ScienceDirect, PubMed, MELINE Ovid and CINAHL to select articles on our topic were identified using a content descriptive thematic analysis approach.

Results: A total of 13 studies published from 2012 to 2022 were included (6 countries, three perinatal types of setting). We were able to identify four major themes: 1) information et demystification, 2) protocol and guidelines, 3) interactions, and 4) parent facilitator role. These results are linked to those of a local mixed methods unmet need assessment held in our neonatology service from 2019 to 2021 to bring more clarity by including quotes from healthcare providers (hcp).

Discussion: Even though literature is scarce on our subject, these results are the first complete and up to date answer to help medical educators identify WHAT needs to be taught to facilitate interactions with parents and hcp's stress management during neonatal resuscitation as well as to optimize the quality and safety of care. They are also useful to understand better HOW to include this type of training in new diversified simulation scenarios based on actors' participation.

PME-118 <u>Aplastic Anemia Self-Assessment Learning:</u> Clinical Presentation, Diagnosis, and Management

Eleftherios Soleas, Queen's University

Background/Purpose: Aplastic anemia (AA) is a serious condition of insufficient production of new blood cells in the bone marrow. Early identification and diagnosis are key to prevent diminished quality of life, increased incidence of infections, uncontrolled bleeding, lifealtering complications, and death. To address this need, we created a foundations course that would guide learners from first-steps to advanced case studies that apply directly to their practice.

Methods: We conducted a needs assessment, data synthesis, and developmental evaluation incorporating literature searches, open and closed ended items to inform the development of a self-assessment tool. Evaluation of the product was conducted using a pre-post design, pre-post-knowledge tests, and learning analytics.

Results: Pre-post evaluation as well as pre-post-knowledge tests, learning analytics, and testimonials of course attendees were integrated in a mixed-method evaluation to reveal significant differences by one-way ANOVAs to show comfort and knowledge improvements, data analytics to investigate adaptive mastery, and deep promise in this effort to improve the treatment outcomes of this disorder.

Discussion: We propose that self-assessment driven case studies is a way to provide a safe space to learn about this complex condition and how to recognize it in all, including special populations such as the elderly and children. It delivers the learning in an engaging fashion, but also reinforces the learning with self-assessment questions and invitation to apply one's clinical practice decision-making and receive consistent feedback derived from gold-standard guidelines and approaches.

PME-119 "Diversity is good, but..": How premeds and nonpremeds view diversification of medical schools

Rida Shaikh, Western University

Background/Purpose: Matriculants from underrepresented in medicine (UIM) pathways face discrimination during medical school. We explored the root causes of this phenomenon through the lens of integrated threat theory (ITT) which postulates 4 components of perceived threat which lead to prejudice between social groups: realistic threats, symbolic threats, intergroup anxiety, and negative stereotypes.

Methods: We interviewed undergraduate students, who were either interested (premed) or not interested (non-premed) in applying to medical school. A codebook was developed based on ITT and interview transcripts were deductively coded. We then conducted a thematic analysis through the lens of ITT and compared themes from both groups.

Results: 28 participants (16 premed, 12 non-premed) completed the study. Both groups expressed opinions mapping to all 4 categories of ITT, but these perceptions were more prominent in the premed group. Premeds perceived a realistic threat that UIM matriculants' would struggle in medical school if they were admitted with lower prior academic performance. Premed students also perceived symbolic threats to healthcare standards, fearing that UIM streams could result in the creation of substandard physicians — these opinions were not expressed by non-premeds.

Discussion: Premeds' concerns regarding academic struggles and falling healthcare standards from UIM pathways are not consistent with existing evidence and were not shared by non-premeds. This suggests that prospective physicians may not share aligning views of quality healthcare with those whom they will someday serve. Education about the importance of diversity and inclusivity in medicine must be initiated before medical school to combat misconceptions amongst prospective students.

PME-120 <u>Cultivating confidence in the practice of secure</u> recovery through education of forensic interprofessional staff.

Shaheen Darani, University of Toronto

Background/Purpose: Recovery is the process of personal change leading to a satisfying, hopeful, contributing life, even within the limits of mental illness. Recovery-oriented care has become a dominant paradigm in mental health service provision and increasingly applied to forensic settings. There is limited evidence on forensic providers' knowledge, skills, and education needs in this practice, and the challenges implementing recovery-oriented care in secure settings with consistency and fidelity. Kennedy (2022) calls for the development of a secure recovery curriculum to address this gap.

Methods: A survey was administered to forensic staff at CAMH (n=300) to identify gaps in staff knowledge and skills and their further education needs in secure recovery. Descriptive statistical techniques were used to analyze data and open-ended questions were analyzed thematically.

Results: Of 108 responses, 45% were nursing staff. Staff forensic experience ranged from 0 to 43 years with median of 5 years. Results showed 79% reported good or excellent knowledge in recovery-oriented principles, however, 44% were not, somewhat, or only moderately confident in their skills in implementing recovery-oriented care; 59% did not believe they received adequate education and 93% were interested in secure recovery education.

Discussion: Results will inform the development of a secure recovery curriculum to boost the confidence of forensic interprofessional staff. Further implications will be discussed.

PME-121 Assessing the Utility of an Opioid Use Self-Assessment Tool for Postgraduate Medical Education and Continuing Professional Development Learners

Nicholas Cofie, Queen's University

Background/Purpose: Canadian future of medical education reports have emphasized self-directed learning as a key component of learning. This makes self-assessment, the first step in self-directed learning, all the more important. As a key part of the AFMC's Response to Opioid Crisis online curriculum, a self-assessment tool was developed to provide residents and practicing physician learners the ability to explore their own perceived and unperceived needs through a curiosity- and challenge-based survey inspired by the CanMEDS and CanMEDS-FM Professional and Scholar roles. We evaluated the utility of the self-assessment tool to better support the learning experience of residents and practicing physicians.

Methods: The self-assessment tool was built in Qualtrics using a combination of Boolean Logic and adaptive mastery, reviewed by the subject matter experts who wrote content for the modules of the curriculum, and then piloted with residents and practicing physicians (n = 60). Participants completed the tool as well as an embedded survey that evaluated the utility of the tool.

Results: The majority of the learners (79%) who used the tool reported that it helped them reflect on their practice. Using the tool, about 78% of learners correctly answered that they would use hydromorphone if they decided to switch a 68-year-old patient with mild chronic kidney disease from oxycodone to a different opioid. About 88% correctly identified that among opioids, fentanyl has the most rapid onset of action.

Discussion: This tool can actively help learners explore the limits of their knowledge, needs, and curiosities through the medium of self-assessment.

PME-122 "Not doing it justice:" Perspectives of Family Medicine graduates' on mental health and addictions residency training

Kimberly Lazare, University of Toronto

Background/Purpose: Described as the chief cause of disability in Canada, 1 in 5 Canadians experience mental health concerns.1-3 Moreover, family physicians (FPs) in Canada report feeling inadequately prepared to meet the evolving mental health care needs of the population.3-5 Currently, limited scholarship exists on evaluating the effectiveness of curricula designed to teach mental health and addiction (MH&A) care to family medicine (FM) residents in a Canadian context.5,6

Methods: Eight recent graduates from the University of Toronto's FM residency program participated in semi-structed video interviews. A thematic analysis approach was used to collect and analyze data.

Results: Eight recent graduates from the University of Toronto's FM residency program participated in semi-structed video interviews. A thematic analysis approached was used to collect and analyze data.

Discussion: To our knowledge, this study was the first to conduct an in-depth exploration of recent FM residency graduates' experiences pertaining to MH&A training. In alignment with feelings of unpreparedness documented in literature, majority of recent FM graduates' expressed similar discomfort when managing patients with MH&A concerns.7,8,&9 Additionally, participants reported that residency program time constraints, rotational site differences, and limited exposure to marginalized patient populations all impacted learning and mastery of skills. The findings of this study underscore gaps within the FM residency curriculum and highlights the need to bolster and address current curricular deficits, in order to improve patient outcomes.

PME-123 <u>Academic Medicine Perspectives on Systems</u> Change

Tanya Macleod, Dalhousie University

Background/Purpose: Academic medicine leaders, faculty, staff, and learners convened for a 3-day conference aimed at catalyzing health systems transformation. Speakers and content were selected to delineate the politics and polices of health systems; explore intersectoral collaboration; delve into challenges with health systems service delivery, financing, human resources, and governance; and showcase best practices in health systems strengthening. The conference format included plenary lectures, group discussions, and specialized breakout sessions, addressing priority topics selected by the planning committee of influential academic medicine leaders and experts.

Methods: Following the conference, attendees participated in a post-survey, guided by the consolidated framework for implementation research. The survey aimed to identify goals for change, barriers, and facilitators. Quantitative survey data were analyzed using descriptive statistics and qualitative data were analyzed using content analysis.

Results: The response rate was 33% (28/86). Analysis revealed that 96% gained new insights and 78% intended to initiate change. Common themes emerged: 1) proactive change through networking, collaboration, and demonstration projects, and 2) a desire for ongoing professional development. Enablers included prioritization, deep understanding of needs, and active leadership engagement. Barriers encompassed resource limitations, and compatibility issues with existing processes.

Discussion: This underscores attendees' enthusiasm for transformation, and their desire for professional growth and change. The implications for academic medicine leaders to foster adaptive health systems are significant.

PME-124 Role models performing magic on clinical wards. Jinelle Ramlackhansingh, Memorial University

Background/Purpose: Role modeling in clinical environments has a powerful impact on learners' professional identities. Students voluntarily shadow physicians on clinical wards. Physicians can act as positive role models for medical students.

Methods: This research is part of a larger critical ethnography examining the professional identity development of preclinical medical students at one Canadian medical school. Regular focus groups were done with the students. Interviews were also done with faculty and administrative staff. Participant observation of some classes and governance meetings were completed. The theories of Bourdieu and Foucault were used in data analysis.

Results: The students observed physicians compassionately treating patients. They learnt about using effective communication skills to navigate complex patient issues. They reflected that the physicians worked their magic in the end. Medical students' professional identities are formed through competing discourses of caring and competence. Students can learn about humanism in patient care from role models. Bourdieu would phrase this symbolic capital as "acts of performative magic" as performative acts can reify concepts like humanism. In these cases, observing physicians empathically treating patients was important for students learning. The curriculum did not have time allocated for students to discuss their shadowing experiences with role models. Role modeling is effective teaching skills like verbal and nonverbal communication, and humanism. Role modeling is a valuable educational space that can be used to teach humanism. Pedagogy allowing reflection on clinical experiences should be considered.

PME-125 <u>Teaching the Psychiatric Interview, a Novel</u> Approach

Tim Hierlihy, Memorial University

Background/Purpose: Although the psychiatric interview is the cornerstone of psychiatric assessment, the literature on approaches to teaching it is limited. A novel approach was developed and implemented at Memorial University of Newfoundland and Labrador.

Methods: Anonymous course feedback was collected from the clinical skills course in which the psychiatric interview is taught to pre-clerkship medical students. The learner feedback was compared from the years preceding and following the implementation of the novel teaching method.

Results: The approach has been well received by students. In 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.

Discussion: A novel method of teaching the psychiatric interview was developed with the goal of improving the quality of teaching this skill. The new method was well received by learners. As a side benefit, the approach lends itself well to being delivered remotely so it has continued to function well during the disruption resulting from COVID-19.

PME-126 Integrating Planetary Health Education into Medical Training: The University of Ottawa Experience

Xiu Xia Sherry Tan, University of Ottawa

Background/Purpose: In face of climate change being declared as "the biggest health threat facing humanity" by the WHO, the Association of Faculties of Medicine of Canada released a statement, urging health institutions to build climate-resistant health systems and develop planetary health (PH) education. However, inclusion of PH in medical schools has lacked a comprehensive framework for content and implementation, due to various limitations including limited faculty time and competing learning priorities. Here, we describe a practical, multistakeholder approach for integration of PH to curricula.

Methods: A PH Working Group was assembled, comprising faculty, medical trainees, and a community partner. Guided by the Planetary Health Educational Competencies developed by the Canadian Federation of Medical Students Health and Environment Adaptive Response Task Force, high-yield learning objectives (LOs) were developed. Emphasis was placed on including LOs that promoted knowledge and skills-based competencies to address climate change impacts specific to our local environment. A systematic curriculum scan was performed to identify where these LOs could be integrated into existing pre-clerkship and clerkship educational activities.

Results: A total of 56 new PH LOs were proposed to be longitudinally integrated into existing lectures, case-based learning, physician skills sessions, self-learning modules, and leadership electives. A document was developed for the curriculum renewal committee.

Discussion: PH education is critical for preparing physicians to practice in a world increasingly impacted by climate change. Academic health institutions can utilize this model to adapt their curricula to meet the needs of healthcare professionals. Future directions include implementation and extension to post-graduate medical curricula.

PME-127 Rubrics, reflection and rubbish

Jinelle Ramlackhansingh, Memorial University

Background/Purpose: The Royal College of Physicians and Surgeons of Canada identifies reflection on learning as essential to being a scholar. Reflection on learning supports lifelong learning. The student's complete written reflection assignments about their rural community visits.

Methods: This work is part of a critical ethnography examining pre-clinical medical students' professional identity development. Focus groups were conducted with medical students every six weeks. Interviews were carried out with faculty and administrative staff. Participant observation of students' classes and governance meetings was also done. Data analysis was done using the theories of Bourdieu and Foucault.

Results: The students found the assignment rubrics provided to be too prescriptive. The students commented that they could not truly reflect on their experiences using the prescribed rubric format. They remarked that they were just putting sentences together and they could write rubbish, but once the answers fit the rubric they would pass.

Discussion: The use of reflection assignments as a tool for critical thinking is reversed and becomes a tool for control and counter-ideology. The assignments resulted in students writing to pass instead of true reflections. Care should be taken to ensure rubrics are not too prescriptive. Students should be taught to critically reflect on their experiences. Reflection should include why social and systemic forces shape understandings and assumptions, and how they affect individual actions and decisions. The students wrote their assignments only to pass. The use of educational pedagogy, like communities of practice where students can meet in small groups and verbalize/reflect on their experiences, should be considered.

PME-128 A Comprehensive Analysis of MD Applicants and Matriculants to a Canadian Medical School

Armaan Fallahi, University of Toronto

Background/Purpose: Despite the pivotal role that medical school admissions play in shaping the future of healthcare professionals, little is known about the characteristics of individuals applying to medical schools in Canada. Understanding this applicant pool is essential for evaluating policies related to equity, diversity, and inclusion in medical school admissions.

Methods: A 90-question survey was electronically distributed to all applicants to the MD program at the University of Toronto for the 2021-2022 and 2022-2023 application cycles (n=4302; 4263). Achieving 51% response rate overall (n=1960; 2414), we conducted a comparative analysis between the applicants and matriculants.

Results: Comparison between applicants and matriculants revealed no significant differences in socioeconomic status, although this population may come from higher economic strata than the general population. Lack of sociodemographic differences between applicants and matriculants groups suggest either fairness in the admissions policies or structural barriers at the application submission stage. Our data also indicate that mentorship positively influences the application process by providing increased access to academic and leadership opportunities. Last, our results evidenced ceiling effects regarding the amount of monetary investment in MCAT exam preparation.

Discussion: Our work offers a new avenue for the assessment of equity, diversity, and inclusion policies in Canadian medical school admissions. Our research underscores the need for continued efforts to enable upstream equitable access to medical training and emphasizes the importance of evaluating inclusive practices in admissions.

PME-129 The increasing and evolving needs for student supports at U of C, Cumming School of Medicine

Johanna Holm, University of Calgary

Background/Purpose: The study of medicine can elicit new challenges for students and/or exacerbate existing concerns. The Student Advocacy and Wellness Hub (SAWH) is a place for students to seek support and assistance. We sought to use SAWH appointment data collected from 2016-2022 to understand the number and types of supports students accessed over this period.

Methods: From 2016-2022 data was collected per appointment accessed with categories for appointment type and facilitator. Types of facilitator appointments could include with clinical faculty, as well as psychiatric and psychological referrals with external providers. Less common appointment type trends were classified as 'other'.

Results: Overall, there has been a significant increase in the use of SAWH services. The number of students that accessed SAWH in 2016 was 259 and has risen almost every year to 1234 students in 2022. The unique number of students per class year who have made voluntary appointments has achieved an average saturation of 78% (2017-2021). The majority of appointments focused on CaRMS, elective counselling and career planning. To capture the increasing number of students reporting mistreatment, in 2011 a new appointment category was created. Student access to psychology scaled from 44 appointments in 2017 to 111 in 2021.

Discussion: Given the rising needs of students entering medicine, it is important that schools are well staffed with diverse resources to support learners. Understanding challenges and obstacles that students are encountering can also aid in identifying areas within a medical school or curriculum that should be re-examined to ensure safe learning environments.

PME-130 Ms.

Anikka Swaby, McGill University

Background/Purpose: Obesity rivals smoking as a leading modifiable risk factor for cancer mortality. Diet is a known crucial factor in obesity development and cancer growth. Paradoxically, high BMI has been linked to improved immune checkpoint inhibitor (ICI) efficacy in various cancers, challenging the notion that obesity is universally detrimental in cancer contexts. To address this paradox, we devised a panel of 12 diets that mimic human dietary patterns in mouse models, observing vastly different rates of cancer growth and ICI response. Surprisingly, not all obesity-inducing diets were beneficial for ICI, prompting an investigation into the cause of these disparities. Given the pivotal role for the food-gut axis in shaping ICI responses, we propose that the interplay between diet and systemic inflammatory responses to gut microbiota contributes to the variations in ICI response across obesity-inducing diet models.

Methods: We collected stool samples and performed metagenomic shotgun sequencing to determine gut microbial composition changes in our models. The analyses focused on obesity-inducing diets associated with ICI response (obese-ICIR), American and High Fat, or resistance (obese-ICINR), Ketogenic and Mediterranean.

Results: Analysis unveiled a striking differentiation in gut microbial composition between obese-ICIR and obese-ICINR evident at the family level. To delve deeper, we performed linear discriminant analysis coupled with effect size measurements, which identified enriched species associated with ICI response.

Discussion: These findings suggest that diet-induced gut microbial modifications, in the context of obesity, may influence ICI efficacy, and offer promising avenues for the development of new therapeutic approaches that leverage the microbiome to enhance cancer treatment outcomes.

PME-131 Assessing barriers identified by providers for exclusive breastfeeding and use of human milk substitutes during hospital admission for delivery: a survey-based study

Dourra Assani, University of Ottawa

Background/Purpose: The World Health Organization created the Baby Friendly Initiative (BFI) as an effort to improve exclusive breastfeeding (EBF) rates, which remains below the 75% target in Ontario. Since healthcare providers (HCP) play a key role in breastfeeding promotion, we aimed to assess their perspectives regarding breastfeeding to understand the factors that lead to the use of human milk substitutes (HMS) and improve EBF rates at The Ottawa Hospital (TOH).

Methods: An online survey was disseminated to TOH staff providing maternal and/or newborn care to assess their perceptions on breastfeeding, the BFI, their training, and resources to support breastfeeding at TOH. Frequencies and percentages were generated for quantitative survey data and open-ended questions were analyzed qualitatively using NVivo.

Results: A total of 101 completed surveys were included in the analysis. Most participants recognize the importance of breastfeeding (95.8%, n=95) and received breastfeeding training during their orientation. The most common non-medical reason for administering HMS was parents' personal preference (92.6%, n=95) and participants felt less comfortable discussing breastfeeding benefits with those patients. Participants supported policies that promote breastfeeding but disagreed with policies that restrict access to HMS.

Discussion: Participants perceive that they provide the necessary support to parents willing and able to breastfeed, but that support diminishes when the patient is unwilling to breastfeed. This diminished support could be related to outdated training and to the low EBF rates at TOH as previous studies demonstrated that patient changed their decision to use formula after HCP discussion about breastfeeding's infant health benefits.

PME-132 Promoting Diversity in Surgery through UofC UpSurge

Carolyn Stephens, University of Calgary

Background/Purpose: Underrepresentation in medicine is prevalent throughout undergraduate and postgraduate medical education, as well as in academic leadership. The University of Calgary (UofC) chapter of UpSurge is a pipeline program created to address the lack of Black representation in surgery. Aim: to emphasise the importance of pipeline programs in surgical education to improve diversity and student wellness.

Methods: Pubmed, Medline and Google Scholar databases were searched to identify relevant articles that met one or more of the following criteria: (1) outlined the degree of diversity in surgery education and leadership, (2) assessed the development, implementation and evaluation of pipeline programs, and (3) reported on wellness outcomes from pipeline programs for learners.

Results: Of the 13 identified studies that met the inclusion criteria, nine provided evidence supporting the lack of diversity amongst surgical trainees and leadership. Six studies substantiated the importance of pipeline programs in increasing representation in medical and surgical fields. Lastly, two studies provided evidence supporting the benefit of pipeline programs in improving the wellness of underrepresented trainees.

Discussion: Racialized learners represent disproportionately small number of surgical trainees. We aim to demonstrate the benefits of pipeline programs to increase diversity in surgery, and implementation of these programs on a national scale. The current literature suggests that pipeline programs may increase interest and recruitment of racialized applicants to surgical specialities, enhance wellbeing and facilitate success.

PME-133 Mentoring for admission and retention of Black socio-ethnic minorities in medicine: a scoping review

Julia Kemzang, University of Ottawa

Background/Purpose: Despite numerous mentoring strategies to promote academic success and eligibility in medicine, Black students remain disproportionately underrepresented in medical school. This scoping review aims to identify the mentoring practices available to Black medical education students, specifically the mentoring strategies used, their application, and their evaluation.

Methods: This work was conducted in accordance with PRISMA guidelines. Primary sources searched included MEDLINE, EMBASE, CINAHL, PsycINFO, Eric, and Education Source. All studies conducted with applicants, medical students, and black residents were included. All research designs detailing the implementation of various mentoring strategies for these students were considered. Articles were processed and evaluated using the COVIDENCE tool by two pairs of reviewers and then synthesized in a narrative fashion.

Results: Our search generated a total of 14 articles. Our findings report that mentoring practices for Black students include peer mentoring, dyad mentoring, and group mentoring. Mentoring is typically offered through discussion groups, educational internships, and didactic activities. According to these articles, evaluation of a mentoring program takes into account (1) pass rates on medical exams (e.g., MCAT, Casper), (2) receipt of an invitation to a medical school admissions interview, (3) successful match to a competitive residency program, and (4) a mentee's report of the overall experience and effectiveness of the program.

Discussion: This project describes the current state of knowledge about mentoring black students in medical education. Overall, our findings will serve to inform best practices for mentorship adapted within the Black student population in a medical education context, in order to address the under-representation of Black medical students in Canada.

PME-134 Exploring Patients' and Providers' Experiences and Insight on Perinatal Cannabis Use: A Qualitative Study

Julia Kemzang, University of Ottawa

Background/Purpose: Cannabis is one of the most common recreational drugs used in pregnancy. Despite substantial research on its associated risks, cannabis use persists among pregnant individuals in Canada. We aim to explore the experiences and perspectives of patients and healthcare providers on perinatal cannabis use.

Methods: We conducted semi-structured interviews with consenting obstetric patients using cannabis in pregnancy and healthcare providers in Ontario providing care preand post-legalization of cannabis. Patient interviews covered sociodemographic information, perinatal cannabis use patterns, and the nature of counselling received/information sought. Provider interview questions included prompts about job experiences and perspectives on perinatal cannabis use. Transcripts were thematically analyzed using Nvivo11TM. Subthemes were identified following a team consensus and classified using the COM-B model.

Results: To date, eight providers and six patients have been interviewed. Subthemes from providers and patients were grouped into three main themes of the COM-B framework: capability, motivation, and opportunity. Capability was captured through providers' reports of limited training on perinatal cannabis counselling and patients' reports of perinatal cannabis use for subsiding pregnancy-related symptoms. Motivation captured patients' reports of relief of pregnancy symptoms following perinatal cannabis use. Opportunity captured the legalization of cannabis for both providers and patients: patients felt more comfortable disclosing their cannabis use to providers, and providers saw an increase opportunity for screening.

Discussion: Our findings will be integral to the development and success of resources that can be created for individuals considering or are currently consuming cannabis during pregnancy and for providers who may be providing care to this population.

PME-135 An emergency department quality improvement intervention for decreasing time to pain medication in sickle cell disease (SCD)

Renee Bailey, University of Toronto

Background/Purpose: Sickle cell disease (SCD) is painful and life-limiting. Most people with SCD in Canada are Black and report significant delays in receiving emergency department (ED) analgesia. No Canadian studies exist on improving time to analgesia (TTA) for adults with SCD. Our team, including patients, designed/implemented educational ED interventions from Nov 2020-Jan 2021 to address barriers to care.

Methods: Applying the PDSA (Plan, Study, Do, Act) approach, we used chart reviews to establish TTA after our first PDSA cycle, post intervention (Jan 2021-Jan 2022), and compared it to pre-pandemic baseline data (Jan 2019-Jan 2020). We included a control group of ED patients with renal colic (RC) to mediate pandemic impacts. We aimed to decrease the TTA by 30 minutes post intervention. We anticipated a significant increase in the number of patients who received opioid analgesia 30 minutes post-triage as recommended by Ontario guidelines

Results: We reviewed 456 SCD visits (231 pre, 225 post) and 406 control RC visits (244 pre, 162 post). The proportion of visits for SCD achieving the 30 minute target for opioids tripled post-intervention (5.2% to 15.6%). The run chart for SCD visits showed a 10 data points shift below the SCD group median post (pre median 87 minutes, IQR 80; post median 62, IQR 62). No shifts were noted in the run chart for the RC group. The SCD run chart further suggested a trend back toward the pre-intervention baseline after the intervention.

Discussion: Data shows that improving TTA for patients with SCD is possible, even during a pandemic.

PME-136 Comparing diabetes outcomes between Ontarian immigrants and non-immigrants of similar marginalization: a population-based cohort study

Shadia Adekunte, University of Toronto

Background: It is known that recent immigrants face socioeconomic barriers to diabetes care. Our objective was to examine the association between immigration status and quality of diabetes care among people of similar marginalization.

Methods: We conducted a population-based cohort study using administrative databases at ICES. We included Ontarians aged ≥18 diagnosed with diabetes on or before April 1st, 2019. The exposure was immigration (after 1985), and the comparison group was long-term residents (non-immigrants or pre-1985 immigrants). The outcomes were the frequency and levels of three routine investigations for diabetes care: HbA1c, LDL cholesterol and urine ACR tests, and the frequency of retinal examinations. We characterized the frequency and levels of each outcome among immigrants and non-immigrants in the most materially deprived quintile of the population.

Results: We included 84,661 immigrants and 238,346 non-immigrants. Immigrants were significantly more likely to undergo LDL cholesterol (RR=1.14, 1.13-1.15) and urine ACR (RR=1.12, 1.11-1.14) testing, and were also more likely to achieve a urine ACR <2.0 mg/mmol (RR=1.22, 1.20-1.23) compared to non-immigrants. Immigrants had similar rates of HbA1c testing (RR=0.99, 0.98-1.00) and achievement of HbA1c \leq 7% (RR=0.98, 0.97-0.99). Retinal examination rates were decreased in the immigrant population (RR=0.93, 0.92-0.94).

Discussion: Our findings suggest that immigrants receive better health services than non-immigrants of similar marginalization on some, but not all, indicators of diabetes care.

PME-137 <u>Racial and Ethnic Disparities in Glycemic Control</u> in Children and Youth with Type 1 Diabetes

Suzanne Simba, McGill University

Background/Purpose: There has been growing evidence of racial disparities in diabetes outcomes. We sought to examine the relationship between a) race and ethnicity; b) ethnocultural composition; and c) immigration status and glycemic control in children with T1D.

Methods: Retrospective cohort study using the Montreal Children's Hospital Pediatric Diabetes Database of children (0-18 years) with T1D for at least a year with a visit between November 2019-October 2020. The main exposure was race and ethnicity categorized as racialized or non-racialized. We determined the association between a) racialized group (primary exposure); b) ethnocultural composition; c) immigration status and mean hemoglobin A1c (HbA1c) in the year following the index visit using multivariable linear regression, adjusting for age, sex, diabetes duration, processes of care, insulin pump use, continuous glucose monitoring (CGM) system use, and socioeconomic status (SES).

Results: For race and ethnicity analysis, 185 children were included of which 21.1% were racialized. The mean age was 13.5 and mean HbA1c was 8.2%. In the adjusted analysis, HbA1c was 0.65% higher in the racialized group compared to the non-racialized group (95% CI 0.17%, 1.14). For the ethnocultural composition analysis, HbA1c was 0.80% lower in the moderately diverse compared to the least diverse quintiles (95% CI -1.44, -0.16). Immigration status was not significantly associated with mean HbA1c.

Discussion: Evidence highlights racial and ethnic disparities in health outcomes among children with T1D in a universal health insurance system. Our findings will contribute to the body of evidence needed to support interventions aimed at addressing structural racism in health care.

PME-138 <u>Distraction therapies</u> (visual and auditory) for clinical Otolaryngologic procedures performed on the upper airway. A systematic review and meta-analysis

Tanika Curry, University of Ottawa

Background/Purpose: This study aims to assess the effectiveness of auditory and visual distraction interventions on patient discomfort, pain and anxiety when undergoing office-based Otolaryngologic upper airway procedures.

Methods: The methods were reported with guidance from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. Searches were done through Cochrane Central Register of Controlled Trials, Lilacs, MEDLINE, Embase, PsycINFO, and Cumulative Index to Nursing and Allied Health Literature.

Results: We identified 138 records; two randomized controlled trials using virtual reality as distraction during office-based otolaryngologic upper airway procedures in adults and one in children were included. All studies had some concerns regarding risk of bias. In adults, anxiety was lower in the virtual reality group than in the standard of care, (mean difference -16.72, 95% CI -27.19 to -6.24, p=0.002, I2=0%). There was no difference in pain between groups, (mean difference -0.28, 95% CI -1.24 to 0.68, p=0.57, I2=10%). There was no difference in satisfaction between groups (Standardized mean difference 0.18, 95% CI -0.22 to 0.58, p = 0.37, I2=0%). One Pediatric study was included hence no meta-analysis was done. Anxiety and pain were lower and satisfaction was higher in the group using virtual reality.

Discussion: The use of virtual reality distraction in addition to standard analgesia during office-based Otolaryngologic upper airway procedures reduced anxiety in adults. It did not decrease pain or increase the level of patient satisfaction. In the paediatric population there is benefit for procedural anxiety, pain and satisfaction

PME-139 Pre and post-season knee kinematics in varsity athletes: ACL prevention using kinect

Tatiana Joseph, Université de Montréal

Background/Purpose: ACL injuries may be career ending and have an extended rehabilitation. It's been shown in multiple studies that women are 8 times more likely than men to suffer from non-contact ACL injuries, whether they're athletes or not. The goal of this study is to test an easy-to-use motion tracking device assessing knee kinematics and to identify if ACL injuries can correlate to the difference between pre and post-season knee kinematics.

Methods: Inclusion criteria were varsity athletes (18 - 30 years old) from basketball, football, rugby, soccer and volleyball. Pre and post-season drop vertical jumps were recorded using the Kinect-V2. For each jumps, 3 angles were measured and compared: initial coronal (IC), peak valgus (PV) and peak sagittal flexion (PS).

Results: 67 athletes were included (21 males, 46 females). In women during pre-season, 2 out of 3 angles were above the cut off (PV angle cutoff > 6.16° , IC angle cutoff > 2.96° and PS cutoff < 93.82°), making them at risk for ACL injuries (PV = 5.55 pm 0.97; IC = 4.24 pm 1.09; PS = 92.90 pm 6.94). As the season progresses, there's a statistically significant improvement in PV (mean = 0.761522, p< 0.038) and IC (mean = 2.234, p< 0.025), while IC remains above cutoff. The PS angle worsens, but without statistical significance (mean = 1.929, p<0.054).

Discussion: Meaning that women tend to have better valgus knee biomechanics and less knee flexion, but no changes significantly protects against ACL injury, therefore prevention and monitoring would be key.

PME-140 The impact of serum 25(OH)D on shoulder strength after instability post-traumatic event

Tatiana Joseph, Université de Montréal

Background/Purpose: Multiple researches show that vitamin D is important to bone health but also important in extra skeletal functions, including muscle growth and strength. We aimed to test the correlation between serum 25(OH)D and strength and functional range of motion in patients with post-traumatic shoulder instability.

Methods: Inclusion criteria were patients who had suffered a traumatic shoulder luxation. Subgroups were established based on preoperative dosage of serum 25(OH)D (< 35nmol/L (n=17), serum < 50nmol/L (n=51), a serum < 74nmol/L (n=77) and serum > 75nmol/L (n=23)). Patients underwent strength and functional range on motion assessments. Comparative analysis between the affected and the healthy contralateral limb was performed for each subgroups.

Results: 103 patients were included (30 males, 73 females). When comparing both limbs, there was a significant difference (p<0.01) in range of motion (900 internal rotation, 0 and 900 external rotation) in patients with serum below 75 nmol/L. In patients with dosage above 75 nmol/L, it was only significantly different in external rotation. There was a significant difference in muscle strength (p<0.01) in abduction, flexion, internal and external rotation between both limbs in patients with serum below 75 nmol/L. In patients with dosage above 75 nmol/L, it was only significantly different in flexion and external rotation (p<0.05).

Discussion: In patients with vitamin D deficiency, there seems to be a considerable difference between the affected and healthy shoulder when comparing range of motion and strength. This suggests that preoperative strengthening, vitamin D supplements and rehabilitation may need to be considered.

PME-141 The Impact of Cultural Beliefs in Lung Cancer Management among Individuals of Different Ethnic Backgrounds: A Scoping Review

Toyemi Opeoluwa-Calebs, University of Toronto

Background/Purpose: Lung cancer is a leading cause of cancer-related deaths in North America, with notable disparities in incidence and outcomes across diverse racial and ethnic groups. Cultural beliefs are key influencers of care-seeking behaviors in minority patients, making it essential to understand their role for addressing these disparities.

Methods: To explore this, we conducted a comprehensive scoping review. Our systematic search covered electronic databases (Medline, Embase, APO-CINAHL, PsycINFO, Scopus, TRIP Pro) using relevant keywords and subject headings. We also investigated supplementary sources like reference lists, grey literature, and websites. Collaboration between a medical student and librarian ensured a methodical approach. We included all peerreviewed literature to date, identifying eligible studies through a two-stage process: initial screening of titles and abstracts, followed by full-text review. Discrepancies were resolved through consensus or third-party consultation. The study selection process was documented with the PRISMA flow diagram.

Results: Please note that the screening process is ongoing to be completed by the end of this month. Our scoping review commenced with 8,065 references, removing 2,443 duplicates, yielding 5,622 unique studies. Subsequently, 2,285 studies underwent title and abstract screening, with 2,277 excluded. Currently, eight studies have reached the full-text eligibility assessment phase.

Discussion: Our review underscores the profound impact of cultural beliefs on lung cancer care, highlighting the need for culturally sensitive interventions. Healthcare systems must consider cultural factors in patients' decision-making and experiences to address disparities. Developing culturally tailored interventions can bridge the gap in lung cancer care and improve health outcomes for all.

PME-142 Are we there yet? Critical discourse analysis of student feedback on Service Learning

Barbara Borges, University of Ottawa

Background/Purpose: Service Learning (SL) is a curricular requirement for undergraduate medical education students at the University of Manitoba (UM), and draws on Mitchell's (2008) principles of Critical Service Learning (CSL). Reflective exercises "for marks" may bias student responses. Summative course feedback is not graded, providing a forum for more candid expression. This project analyzed anonymous, summative feedback about how students' experiences and perceptions of SL aligned with Mitchell's CSL principles.

Methods: Surveys from years 2(n=69) and 3(n=70) reflecting on the previous year were analyzed. In addition to the standing review of this data, we explored how it tracked with Mitchell's principles. We mapped each of the 22 survey questions to Mitchell's principles then used critical discourse analysis methods to identify emergent themes and dominant discourses within the narrative data. Within each principle, questions' themes and dominant discourses were considered in aggregate to explore (mis)alignment with CSL principles.

Results: We have identified interesting preliminary emergent themes: multiple students described the purpose of SL is to "help" the community; fewer students used language such as "work alongside", "work in solidarity with", or "learn from" community. Language describing SL as "extra-curricular" does not reflect that SL is a curricular requirement and may serve to diminish its importance and/or curricular validity.

Discussion: These results will identify areas of strength, gaps and opportunities, to more effectively advance Mitchell's principles of CSL. Applications of these results will directly inform revisions to the SL student orientation, and modifications to existing reflective assignments to better reflect and incorporate Mitchell's principles.

PME-143 <u>Déterminants de l'impact négatif de la pandémie</u> sur les familles francophones des Prairies Canadiennes

Anne Leis, University of Saskatchewan

Background/Purpose: Le contexte récent de pandémie a exacerbé la situation minoritaire des familles francophones dans les Prairies, notamment celles fragilisées par une immigration récente. Financée par les IRSC la recherche voulait documenter l'impact de la pandémie sur les familles francophones avec jeunes enfants au Manitoba, Saskatchewan et Alberta et à trouver des solutions post-pandémie. Cette présentation se limitera à discuter des facteurs associés avec les impacts négatifs et des pistes de solutions.

Methods: Fondé sur les informations recueillies dans six Cafés du monde dans les trois provinces, un sondage en ligne a été développé et distribué par les organismes communautaires francophones. Des analyses descriptives par province et de régression ont été menées.

Results: Des 320 participants dont 78 % de femmes et 20% de nouveaux arrivants, plus de la moitié ont affirmé que la pandémie avait beaucoup affecté négativement leur famille et les avait rendus anxieux comme membre de la minorité francophone. Le manque d'information en français sur la pandémie et les risques associés, l'isolement et la santé mentale fragile ont été souvent soulignés. Les participants avec une faible compréhension de l'anglais ont été affectés négativement 2 fois plus que ceux qui étaient à l'aise dans les deux langues. Les recommandations prioritaires visaient plus de mesures et ressources pour mieux desservir les communautés francophones des Prairies.

Discussion: Tenir compte de la minorité linguistique officielle au Canada est essentiel dans la formation médicale, et les services de santé et gouvernementaux. Cela pourrait aussi améliorer les services à d'autres minorités culturelles.

PME-144 <u>"She repeatedly used the N word": Anti- Black</u> racism in Canadian medical education, qualitative evidence from the prairies

Jacob Alhassan, University of Saskatchewan

Introduction: The last three years have witnessed increased interest in addressing anti-Black racism in Canadian medical education. We aimed to contribute to the empirical evidence base on Black medical learners' experiences of racism and to bear witness to and reveal the contexts within which racism is experienced by medical learners.

Methods: Drawing on critical race and structural violence theories, we conducted 17 interviews with Black medical faculty, students, residents and staff in Saskatchewan. We thematically analyzed interviews using instrumental case study methodology.

Findings: Thematic analyses revealed five central themes bearing witness to experiences of racism and the compounding nature of racist exposures as learners progress in medicine. Medical learners experienced racism through "uncomfortable encounters microaggressions" that left them unsure if mistreatment was racism. "Blatant acts of racism" were instances where patients and superiors harmed students in various ways including using the N-word. Learners also experienced "curricular racism" through the absence of the Black body in the curriculum and/or the undue pathologizing of blackness. "Medical hierarchies" reinforced anti-Black racism by undermining accountability and protecting powerful perpetrators. Finally, Black female medical learners identified "intersecting oppressions and misogynoir" that compounded their experience of racism. We propose the 'increasing exposures' model to reveal how and why racist experiences worsen as learners progress in medicine

Conclusion: Anti-black racism remains pervasive in Canadian medical education and is experienced subtly through microaggressions or blatantly from different sources including medical faculty. As Black learners progress in medicine, anti-Black racism worsens dues to increased racist exposures.