

Trust, growth, and connection: the path forward in residency education

Confiance, croissance et relations humaines : l'avenir de la formation médicale durant la résidence

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080 A novel 3D printed knot-tying board for procedural skills development in surgical disciplines

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Introduction: Knot tying is a cornerstone of procedural skills, among the first techniques taught to trainees. Despite the importance of proficiency in knot-tying, medical students and residents face challenges in learning this skill due to limited access to training tools. Commercial knot-tying boards, often costly and with lengthy shipping times, pose adoption hurdles for time-constrained rotations. In recent years, 3D printing technology has revolutionized medical education, offering affordable, customizable tools that break barriers to skill acquisition and fostering equitable healthcare practices. Our innovation aims to address this challenge by introducing a low-cost 3D printed knot-tying board tailored for surgical discipline skill training. The board replicates clinical scenarios, offering learners a realistic and standardized platform to practice a diverse range of encountered knot-tying techniques.

Methods: Using computer-aided design software (Autodesk Fusion 360), we designed a modular board to enhance proficiency in three key knot-tying aspects: 1) proper

technique, 2) tension handling, and 3) depth adjustment. Iterative development, incorporating feedback from students, residents, fellows, and staff, optimized the board. Once finalized, the board was printed on a consumer-grade 3D printer using polylactic acid (PLA), an economically and environmentally viable plastic.

Results: Feedback from 18 participants— medical students, PGY 1-5 residents, and fellows—highlighted the board's effectiveness in a pilot study in providing a realistic and accessible platform for honing knot-tying skills that improved overall learner confidence.

Conclusion: The 3D-printed knot-tying board offers a realistic, tangible, and standardized platform for practicing knot-tying techniques commonly used in surgical disciplines. The board is cost-effective and scalable, making it accessible for training programs. This innovative approach enhances procedural skills training, contributing to improved patient outcomes and fostering equitable medical education practices.

081 Artificial Intelligence revolution: Transforming imaging-based residency programs

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Introduction: Artificial intelligence (AI) in medicine is advancing at an unprecedented pace, with significant implications for imaging-based specialties like Diagnostic and Molecular Pathology, Diagnostic and Clinical Pathology, and Diagnostic Radiology. These fields stand to benefit from the enhanced precision, workflow efficiency, and decision support offered by AI. However, competency-based medical education (CBME) frameworks currently lack competencies addressing the integration of AI into training for these specialties. This study identified the unique opportunities and challenges faced by imaging-based residencies compared to other residency programs, emphasizing the need for tailored AI competencies.

Methods: An extensive examination of the extant literature on artificial intelligence and tasks such as image analysis, molecular diagnostics, and real-time clinical decision-making, highlighted the barriers to fully and effectively integrating AI into imaging specialties. This project focused on evaluating the existing CBME framework to identify gaps in AI-specific training for imaging-based residency programs.

Results: Critical analysis has identified that case-based scenarios, simulations, and AI-powered diagnostic tools address the unique requirements of imaging-based residencies. Existing competencies can be aligned to ensure measurable and progressive skill development, emphasizing diagnostic accuracy, workflow optimization, and the ethical considerations specific to imaging-based residencies. These specialties require targeted training in the critical evaluation of AI tools and ethical implications tailored to the significant reliance on imaging and data interpretation. Active learning strategies to address the specific challenges when interpreting AI-generated outputs in imaging workflows are essential.

Conclusion: Imaging-based residency programs face unique demands in integrating AI competencies compared to other specialties. By embedding AI into their curricula, these programs can bridge critical gaps in the CBME framework, ensuring residents are prepared to navigate AI-driven diagnostic environments. Future efforts will focus on piloting these strategies and assessing their effectiveness in training imaging-based specialists for the evolving landscape of healthcare.

082 Artificial Intelligence capacity and uptake in Canadian Continuing Professional Development offices: Are we ready?

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Background: Before Continuing Professional Development (CPD) can be called upon to prepare generations of healthcare professionals to augment their clinical and teaching practice with Artificial Intelligence (AI). The implementation of AI technologies within Canadian CPD offices is ongoing. It is not uniform across the country, however. Some offices have made investments in time and others in personnel to investigate AI's potential to transform and accelerate the development of professional development activities and tasks.

Methods: This survey is an environmental scan of CPD offices and organizations in Canada on Artificial Intelligence. We distributed the survey by email to senior leaders to all 17 CPD offices in Canada and four health regulators and agencies.

Outcomes: We received responses from 12 CPD offices and three regulators (71% response rate). University offices and regulators indicated vastly diverse levels of perceived preparedness, capacities, expertise, and policy development. Most universities and all regulators have begun to develop local expertise in AI and considered it important to accomplish their mission. Four offices had developed AI tools and in at least three distinct cases the tools developed were similar, indicating efforts that bordered on duplicated work.

Discussion: The co-creation of best practices and sharing rather than replicating tool development efforts would yield better outcomes for CPD in Canada leading to consortiums and partnerships across institutions. The authors of this abstract are in the process of establishing an AI CPD Community of Practice that shares tools as well as a best practices guideline for Canadian CPD offices.

083 Preceptors' perspectives on AI scribe use in Family Medicine residency education

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Introduction: The use of Artificial Intelligence (AI) scribes for clinical documentation is rapidly expanding. While evidence highlights benefits for healthcare professionals, the impact of AI scribes on medical learners remains underexplored, leaving educational institutions without guidance. This study aimed to determine the perspectives of Family Medicine preceptors on the use of AI scribes for themselves and their residents.

Methods: A cross-sectional survey was conducted in 2024 with Family Medicine preceptors affiliated with the University of Alberta. Of 948 invited preceptors, 79 (8.3%) participated. The anonymous survey assessed interest and comfort levels with AI scribe use in clinical practice, both personally and for residents. The study was approved by the University of Alberta Research Ethics Board (Pro000145033).

Results: Among respondents, 19% reported using AI scribes, with the highest uptake (31%) in the 25-34 age group. No AI use was reported among preceptors aged 55 and older. Perceived benefits of resident AI use included increased focus on patient care, time savings, and improved documentation accuracy. Challenges included maintaining residents' understanding of non-AI documentation methods, difficulties in competency assessment, and the absence of clear policies on AI use in medical education. The median comfort level for resident AI use was 4 on a 1-7 scale. A positive correlation ($r = 0.63$) was identified between preceptors' own interest in AI scribes and their support for residents using them.

Conclusions: This study offers a snapshot of AI scribe adoption in Family Medicine education. While some preceptors have embraced AI scribes, hesitancy persists regarding their use by residents. Successfully integrating AI scribes into residency training requires balancing technological advantages with the preservation of medical education needs.

084 Trust in transition: Family Medicine residents share insights on entrustment scales in Maternity Care assessment

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Introduction: The shift to competency-based medical education (CBME) has made entrustment scales more common in postgraduate medical education. The literature shows that learner perceptions of assessment tools impact their usefulness, little is known about the perception of entrustment scales by medical residents, particularly in family medicine. This study aims to understand how family medicine residents make meaning from feedback provided via an entrustment scale tool in the Family Medicine maternity care context.

Methods: University of Toronto Family Medicine residents completing their maternity care rotation at Mount Sinai Hospital were invited to discuss their experience with the entrustment scale tool in individual interviews conducted between August 2023 and May 2024. Residents were asked to talk through the feedback provided in one of their completed assessments. Specifically, they were asked to compare feedback received to feedback from traditional Likert-scale based tools. Interviews were audio-recorded, transcribed and analyzed iteratively. Data was coded and analyzed by team members using a constant comparative approach until consensus was achieved regarding emergent themes.

Results: Fourteen interviews were conducted. Four factors were identified related to how residents create meaning from feedback provided by the entrustment scale. (1) Receiving the feedback in real time is important to allow growth, (2) Specific free-text comments are valued when they identify areas of strength and areas needing improvement, (3) Residents value feedback that situates them relative to their peers, and (4) The shift from a traditional Likert-scale tool requires a shift in mindset that may vary among learners.

Discussion: In order to ensure that feedback is valuable and formative for postgraduate trainees, programs should consider the factors that impact how learners create meaning from feedback provided. These should impact entrustment scale tool design as well as how they are used and integrated into programs of assessment.

085 Enhancing programmatic assessment for compassionate concussion care training: Identifying diversified needs through triangulation in Spiral Integrated Design

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Background: Compassionate care training requires inclusivity of diverse healthcare perspectives, yet diversity in programmatic assessment remains underexplored. This study aims to leverage programmatic assessment to evaluate physician trainees through multiple lenses and identify compassionate care training needs.

Methods: A two-stage cohort assessment was piloted in the SPIRAL Integrated Compassionate Care Curriculum, using concussion as the clinical context due to its diagnostic and management complexity. All residents were invited to the intervention, with SPIRAL participants assessed 6 months later.

Stage 1 involved an 18-question multiple-choice knowledge test administered pre-intervention to all residents and 6 months post-intervention to SPIRAL participants, with data collected via Qualtrics and REDCap.

Stage 2 assessed post-intervention Objective Structured Clinical Examination think-aloud data from SPIRAL participants, scored by a physician and an allied health professional using validated Compassion CanMEDS Learning Rubrics based on 11 Entrustable Professional Activities (EPAs).

Results: From 2022-2024, 71.4% of residents (153/214) attended the intervention, with a 92.8% knowledge test completion rate (142/153). Pre-intervention t-tests showed no significant knowledge differences between SPIRAL participants (n=10) and baseline residents (n=142) (\bar{x} =10.300 vs. \bar{x} =10.085, p =0.764). Repeated measures ANOVA demonstrated significant improvement across pre, post, and 6-month timepoints (n=9, p =0.005, η^2 =0.486). Patient communication/management questions scored the lowest (61.5% correct) among learners, while compassionate care EPA scores (Management Cost: 1.88/5; Social Determinants of Health: 1.55/5) were rated the lowest by reviewers.

Interpretation: Programmatic assessment, integrating qualitative and quantitative data, effectively identifies compassionate care training gaps. This approach captures equitable and inclusive perspectives, fostering trust, growth, and collaboration among learners and healthcare partners.

086 Addressing physician burnout through character development: Insights from a post-graduate leadership program

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Introduction: Physicians face significant burnout due to value misalignment between the ideals they aspire to uphold and the realities of their training environment and the healthcare system. This misalignment, termed a "crisis of character," undermines physicians' well-being, patient care, and the broader healthcare system. Despite extensive focus on cognitive and clinical competencies, the neglect of character development has exacerbated this crisis. The purpose of this study was to explore how character development impacts residents' well-being, particularly in the context of this value misalignment. Our central research question asks: How does character development during residency influence physician well-being?

Methods: A year-long character-based leadership course was piloted in postgraduate medical education. Using a qualitative descriptive design, we interviewed residents and staff physician mentors, conducting 21 semi-structured interviews before and after the course. Interviews explored included value misalignment, character development, and well-being. Interviews were transcribed and analyzed using qualitative latent content analysis to uncover underlying themes.

Results: Participants highlighted the dissonance between their values and the pressures of clinical practice, such as resource constraints and efficiency demands. This misalignment often led to frustration, guilt, and moral injury. The character-based leadership program provided structured reflection, mentorship, and communal learning, fostering alignment between personal and professional values. Participants reported enhanced resilience, a stronger sense of belonging, and a renewed connection to their core values. Key outcomes included improved well-being, emotional validation through shared experiences, and the ability to navigate systemic challenges by grounding decisions in character strengths such as integrity, humility, and courage.

Conclusion: Character development during residency can help to address the root causes of burnout by aligning personal and professional values, fostering emotional resilience, and promoting humanistic practice. Residency programs should integrate structured character development alongside competency-based training to enhance physician well-being and restore a sense of purpose in the medical profession.

087 Electroconvulsive Therapy (ECT) bootcamp simulation training for Psychiatry Residents

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Introduction: Competence Based Medical Education requires the completion of Entrustable Professional Activities (EPAs) which are discrete clinical tasks that trainees need to learn. Competence Committee data from the Psychiatry Program at the University of Toronto showed PGY2 residents experienced challenges with completing Core EPA #7 for Psychiatry: Integration of principles and skills of neurostimulation into patient care. Simulation-based education can bridge the gap between theory and practice and offers a safe environment for residents to develop skills and gain confidence before treating actual patients. This led to the development and evaluation of a one day ECT Simulation Bootcamp to teach neurostimulation and practice delivery.

Methods: Eight residents participated in the simulation, comprised of two scenarios. The first station focused on the ECT delivery using a high-fidelity mannequin and ECT machine. The second station involved obtaining consent from clients with varying levels of capacity. Simulated Participants as patients or substitute decision makers were used for this scenario. EPAs were completed during the simulation and an experienced physician gave formative feedback. All residents participated in a debrief and completed pre-and-post surveys based on Moore's (2009) framework, measuring confidence on topics related to the workshop learning objectives and overall experience. Descriptive statistics and a paired sample t-test were used to analyze the data.

Results: All eight residents completed pre-and-post surveys (100% response rate). Learners reported statistically significant gains in confidence on topics related to the learning objectives from pre-training [Mean (1.96), SD (0.40)] to post-training [Mean (3.75) SD (0.40)] with an average increase of 1.96 (82.7%) on a 5-point scale. All learners (100%) reported intention to change practice following this simulation training and all reported being satisfied/very satisfied with the training (100%).

Conclusion: Simulation-based education, like the ECT Bootcamp can enhance resident confidence, skill development, and facilitate formative assessments such as EPA completion.

088 Impact of a Pediatric multidisciplinary Continuous Renal Replacement Therapy education day on perceived confidence levels before and after the intervention

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Background: Continuous Renal Replacement Therapy (CRRT) is a complex and vital technique used in pediatric intensive care for various indications. Effective management of CRRT requires a highly skilled, multidisciplinary team, including pediatric intensivists, nephrologists, and nurses. Proper training is crucial not only for routine management but also for emergency situations. A targeted educational intervention, such as a multidisciplinary education day (EdDay) focusing on CRRT, may enhance team members' confidence and competence in patient management. This study aimed to assess the impact of an 8-hour multidisciplinary education day (EdDay) on the confidence levels of PICU fellows, nephrology fellows, and PICU nurses in managing CRRT.

Methods: A descriptive, predictive quantitative study was conducted, involving participants from pediatric intensive care and nephrology teams. The EdDay included lectures, hands-on activities, case-based discussions, and simulations. Participants completed a level of confidence survey in various aspects of CRRT management before and after the intervention, and descriptive statistics were used to analyze pre- and post-intervention data.

Results: Of 26 participants, 18 (69%) completed the pre- and post-surveys. Prior to the EdDay, 33% of participants had never attended CRRT training, and 44% reported low confidence in operating CRRT. Only 16% felt very confident in their skills. After the EdDay, 33% felt very confident, and only 5% reported low confidence, reflecting a significant improvement in participants' self-confidence across all CRRT management areas.

Conclusion: Participation in the Pediatric Multidisciplinary Education Day increased participants' confidence in managing CRRT in pediatric intensive care. This suggests that structured, hands-on multidisciplinary training can enhance the clinical competencies, teamwork, and confidence of healthcare providers in critical care settings.

089 “Contradictions in practice”: Exploring partners’ experiences of Competency-based Medical Education implementation in a Radiation Oncology residency program

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Introduction: There is growing recognition of the tensions between the theory and practice of Competency-Based Medical Education (CBME) in residency programs. While CBME is championed for promoting resident growth, its practical implementation often reveals challenges, such as assessment burden and inconsistent partner engagement. This study aimed to explore experiences of CBME implementation within the context of a Radiation Oncology program, identify program-derived adaptations to facilitate CBME implementation, and optimize growth and connection for all involved.

Methods: Using Rapid Evaluation methodology and the Core Components Framework, semi-structured individual interviews and focus groups were conducted with twelve program participants, including program leaders and staff (n = 5), faculty (n = 3), and residents (n = 4). Themes were developed using abductive analysis and collaboratively refined by the research team. Adaptations identified by program partners were examined through the lens of the Plan-Do-Study-Act approach.

Results: Four themes were developed to represent participants’ experiences of CBME implementation in Radiation Oncology: (a) Building CBME engagement, (b) Streamlining CBME implementation, (c) Tailoring learning opportunities, and (d) Addressing constraints. Program leaders identified six adaptations for improving CBME implementation, including enhancing engagement through trust and connection, streamlining assessment processes, clarifying and tailoring learning goals, increasing the use of timely documentation, improving technological integration and support, and cultivating a feedback-rich culture for growth and reflection.

Conclusion: This study yielded insight into program partners’ experiences of CBME within a Radiation Oncology residency program and identified opportunities for future development. The results can inform how experiences of CBME implementation to-date can be understood and studied in residency education. These findings underscore the importance of aligning educational innovation with the relational and systemic elements critical to advancing residency education.

090 Followership, the first step to leading in medicine: Integrating an Undergraduate Medical Education leadership workshop into the clerkship years

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Introduction: Leadership skills are required for physicians to optimize patient outcomes and improve the well-being of the healthcare team. Despite this recognition, there is a paucity of published data on Undergraduate Medical Education (UGME) leadership programs during the clerkship period where students can practice leadership skills. The major barrier to implementing UGME leadership programs is the challenge of integrating non-clinical material into an existing, overburdened and clinically oriented schedule. We created and integrated a UGME leadership workshop into the existing UGME clerkship period.

Methods: Based on a local needs assessment, we designed a leadership workshop (quarterly large and small group sessions) with the goal of preparing students for their roles as interns. To avoid overtaxing an existing educational program, we piloted a single session to assess student and educational director ongoing interest. We delivered a single large group didactic-discussion session on followership to third- and fourth-year medical students of two schools affiliated within a US Veterans Health Administration healthcare system. At the conclusion of the session, learners completed a survey to assess engagement and knowledge acquisition.

Results: Thirty learners participated in the large-group discussion. Twenty-one of the thirty participants completed the immediate survey (70%). Eighteen (86%) respondents considered themselves “extremely” or “quite” engaged during the discussions. Nineteen (90%) recommended the sessions to others. When asked to “share what went well in this session,” 100% felt the interactivity/engagement was a key factor in their appreciation of this session.

Conclusion: We successfully integrated a one-hour leadership workshop session into the clerkship period. The student responses were overwhelmingly positive and suggest knowledge acquisition. This pilot offers an example of how medical schools can implement relevant leadership education into existing structures with minimal curricular time.

091 The WIDER LENS curriculum: A new curriculum to advance perspectives on Equity, Diversity, Inclusion, Antiracism, and Physician Health within a residency program's academic curriculum

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Introduction: With the development of Competence by Design by the Royal College of Physicians and Surgeons of Canada, there are new competencies that focus on improving residents' knowledge base on racism and systemic barriers within medicine. Therefore, it became imperative that curriculum was developed that allowed opportunities for learners to have discussions on these very important issues that impact not only patient care but residents and faculty's wellbeing. Hence, a seminar series was developed to address these areas. The benefits and challenges of developing and delivering this seminar series was assessed.

Method: An evidence-based, trauma-informed curriculum called the WIDER LENS Seminar Series (Wellness, Integration of work and life, Dispute Resolution and Difficult Conversations, Equity/Diversity/Inclusion, Anti-Racism, Leadership, Ethics, New Starts/Transition to Practice, and Systems and Organizations) was developed and delivered to residents in a subspecialty program over two years since 2021. This seminar series focuses on equity, diversity, inclusion, antiracism, practice management, physician health, and workplace psychological safety, with the CanMEDS roles embedded throughout. The curriculum was developed and delivered by one faculty member via a virtual format. Attendance and evaluations were gathered to assess the impact, benefits, and challenges of the seminar series.

Conclusion: Narrative feedback from residents acknowledged the benefits obtained from the discussions and evaluations for the WIDER LENS curriculum were highly favourable. Attendance at the seminar series suggested residents were engaged. Narrative feedback from the presenter while overall positive did highlight some challenges with sustainability of the seminar series. Future directions include discussions on how to sustain the seminar series given the benefits acknowledged in improving resident physician's personal and professional growth.

092 This abstract has been withdrawn.

093 Financial capacity assessment in older adults: An unmet need addressed with simulation

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Introduction: Experiential opportunities for geriatric psychiatry trainees to gain the necessary training in financial capacity assessment are often lacking. The purpose of this project is to describe a simulation-based educational intervention aimed at improving knowledge and skills in financial capacity assessments in older adults.

Methods: Eight geriatric psychiatry trainees at the University of Toronto participated in a three-hour training, including a 45-minute didactic seminar on financial capacity assessment and a detailed simulation. PGY5 residents were engaged in a simplified simulation, whereas a more complex case was presented to the PGY6 residents. Actors portrayed an active inpatient corresponding to brief written case scenarios, and two faculty members observed each resident. Residents then wrote a brief report summarizing their findings regarding financial capacity. Faculty debriefed and graded these reports. Entrustable Professional Activities (EPAs) were also completed. Pre-and-post surveys were used to identify learners' self-perceived change in confidence and skills. Descriptive statistics and a paired sample t-test were used to analyze the data in SPSS.

Results: All eight residents completed the pre-and-post surveys (100% response rate). Learners reported gains in confidence from pre-training [Mean (3.36), SD (0.812)] to post-training [Mean (3.67) SD (0.632)] with an average increase of 0.31 (9%) on a 5-point scale (ns). All learners (100%) reported intention-to-change practice following this simulation training and all rated this experience as helpful (n=4) or very helpful (n=4) and engaging (n=1) or very engaging (n=7) in acquiring financial capacity assessment knowledge and skills.

Conclusion: This simulation-based educational intervention was helpful and engaging in improving learners' knowledge and skills in financial capacity assessments in older adults, despite a small sample size that precluded statistical significance of these gains.

094 The transition curriculum: From resident to consultant pediatrician

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Background: The transition from postgraduate training into independent practice is an exciting milestone. Yet it is also a time of significant change, when trainees must adopt new professional identities while learning and adapting skills relevant to their new practice context. We sought to better equip our final-year pediatric residents to embark on this next chapter of their professional lives by creating a new academic curriculum on transition.

Methods: We drew upon multiple sources to inform our curriculum's design and content. We examined Royal College objectives and entrustable professional activities, experiential accounts of transition to practice, and literature describing early-career pediatricians' (ECPs) needs. We then conducted open-ended focus groups with current senior residents to ascertain what curricular content and delivery they felt were important. Finally, we solicited the perspectives of ECPs who had graduated from our program within the last three years.

Results: Our curriculum is based around the following seven areas, including: identity transition; practice management and financial literacy; education skills (clinical teaching, mentoring); integrating non-clinical work (quality improvement, advocacy); physician leadership and administration; rare but important clinical concerns (child protection/maltreatment); and clinical topics that are more prevalent in community settings (neurodevelopmental conditions, mental health).

Discussion: Centering residents and ECPs as partners in the design process helps ensure that a) learners recognize the curriculum's importance in facilitating their immediate future and b) content is relevant. While it would be presumptuous to assume that this curriculum alone will fully prepare learners, it seeks to ease their transition to general pediatric practice as much as possible.

095 Embarking on residency: The role of Entrustable Professional Activities in the transition from undergraduate to postgraduate training

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Introduction: The transition from undergraduate medical education (UGME) to postgraduate medical education (PGME) presents unique challenges for learners, who often feel underprepared. Both UGME and PGME have adopted competency-based medical education (CBME) approaches, which emphasize learner-centered measurement of entrustable professional activities (EPAs). The extent to which CBME approaches facilitate this transition remains unclear. This study explores first-year residents' experiences and examines the role of CBME, with a particular focus on EPAs, in supporting their successful transition from undergraduate to postgraduate training.

Methods: Semi-structured interviews were conducted with five first-year residents at McMaster University. Participants shared insights on their transition to residency and the role of CBME in facilitating this process. They also reflected on data showing the overlap between UGME and PGME EPAs. Qualitative data analysis was informed by direct content analysis.

Results: Residents identified that alignment between UGME and PGME competency frameworks formed a continuum that eased their transition. UGME EPAs helped residents develop the skills to acquire EPAs, including seeking out opportunities, approaching faculty for feedback, and refining their understanding of the value of EPAs. EPAs were viewed as a mechanism to standardize expectations and prompt reflection on the increasing independence and responsibility of residency. Challenges included variability in EPA observation systems, variability in institutional cultures including UGME-PGME differences, and transitioning into disciplines with less EPA overlap between UGME and PGME. Overlap maps between UGME and PGME EPAs were perceived as more helpful in facilitating reflection and the transition to residency in disciplines with higher alignment than in those with less alignment.

Conclusions: Commonalities in the EPA approaches of UGME and PGME can enhance the transition to residency by improving residents' preparedness and confidence, reducing cognitive load, and standardizing expectations. These findings highlight the potential for CBME frameworks to support learners during the transition to residency.

096 Co-constructing equity, diversity, and inclusion (EDI) learning modules alongside youth with lived expertise: Results from an initial pilot among child and adolescent psychiatry trainees

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Introduction: The current social climate has brought attention to longstanding systemic inequities impacting youth mental health. However, equity, diversity, and inclusion (EDI) principles have not been a major component of Canadian child and adolescent psychiatry (CAP) training. Our objective was to address this gap by co-designing, developing, and evaluating a series of evidence-informed virtual educational modules focused on EDI themes relevant to CAP alongside youth with lived expertise.

Methods: Our study is grounded in Kern's approach to curricular development. We began with an environmental scan to better understand the current state of CAP EDI training in Canada, sampling program directors, current trainees, and recent graduates using online surveys and semi-structured follow-up interviews. We then engaged youth advisors with lived expertise to co-design a series of five online learning modules addressing educational gaps identified through our needs assessment. The first module was piloted by ten CAP residents representing five programs from across the country, with evaluation completed through pre- and post-module questionnaires based on Kirkpatrick's 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, LGBTQ+ populations, and refugee mental health). To date, two modules have been developed and the first was piloted among CAP residents across Canada. Seven participants completed both pre- and post-module questionnaires and reported increased knowledge, confidence, and skills as well as intended changes to current practices, with retention demonstrated three months post-module completion.

Conclusion: Encouraging results from our pilot indicate these modules may help address the EDI curriculum gap in CAP training. Evaluation outcomes will inform iterative refinement and development of the remainder of the series. We anticipate this series may be adapted for broad applicability to enhance EDI training for various medical specialties and interdisciplinary healthcare professionals.

097 This abstract has been withdrawn.

098 Chief Residency in laboratory medicine: A key leadership competency with growth of Professional Identity

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Background: In laboratory medicine, leadership competencies are a key asset to prepare health care professionals for the complex challenges of modern healthcare systems. Educational opportunities with assessment of leadership skill, a CanMEDS competency in residency training, is often overlooked in laboratory medicine. This pilot study over three years, aims to bridge this knowledge gap in diagnostic/clinical pathology residency program.

Methods: Assessment with exposure to Leadership skill was explicitly addressed in our diagnostic-clinical - pathology CBME program with the mandatory inclusion of a 6-month chief residency. Grand rounds and interactive sessions on leadership education addressing the importance of leadership skills focusing on defining leadership and their models were undertaken. During the last three years, five residents have completed this task and provided their guided self-reflections. These were subjected to thematic analysis to gather data on the challenges/barriers faced with exploration of its contribution to the growth of their professional identity.

Results: The overarching major theme of the 5 chief resident reflections were that this was a particularly stressful job. They found interactions with fellow residents on program-related issues such as on-call/work /rotation schedules challenging, requiring maneuvers to gain trust. Some found presentation of the resident report at every RPC meeting extremely daunting. Unconditional support from the Program director/program administrator helped ease these situations. Negotiating skills to form 'new' connections were developed and many felt they 'grew as a person' One resident declined being a chief resident due to stress and instead chose the resident wellness lead portfolio for a year.

Conclusion: We believe being a chief resident during the laboratory medicine residency is a fantastic opportunity to develop and understand personal leadership styles in a safe guided environment leading to growth and recognition of their personal individualized professional identity. Increased support for resident wellness during this tenure was recognized

099 The implementation of a longitudinal near-peer PoCUS curriculum in Internal Medicine residency

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Background: Point-of-Care Ultrasound (PoCUS) is increasingly used by internal medicine (IM) residents. Yet, Canadian IM programs offer little formal training. Near-peer teaching has been shown to be effective in medical education. The goal of this study is to evaluate the effectiveness of a near-peer, longitudinal IM PoCUS curriculum.

Methods: This is a single center, exploratory, curriculum evaluation using a difference-in-difference design informed by the Stufflebeam's CIPP and Kirkpatrick evaluation models. A total of 42 first-year IM residents were recruited. Residents were assigned to either the intervention (n=12) or control group (n=30) pragmatically based on their availability to attend small group sessions. The curriculum consisted of four 1.5-hour small group sessions, temporally spaced over 11 months. Near-peer instructors received standardized training and taught small groups of (max 4) learners on pre-selected patients with specific pathologies, supervised by a circulating expert faculty. Control group residents learned PoCUS more opportunistically during clinical work. We analyzed the effectiveness of the intervention using difference-in-difference analysis of scores/ratings on learner perception surveys and pre-/post-PoCUS skill and knowledge tests. Quantitative data were analyzed using descriptive statistics.

Results: Improvements on the PoCUS skill and knowledge test scores were greater in the intervention than in the control group (respectively 25.9% vs 13.2% for skill and 20% vs 7.9% for knowledge). Increase in confidence levels in both practical skills and knowledge were also greater in the intervention group (respectively 31.4% vs 18.6% and 24.3% vs 13.6%). Average frequency of PoCUS use increased by 34.3% in the intervention group and 12.9% in the control group. Novice learners in both groups demonstrated the largest improvements in all domains.

Conclusion: A longitudinal, near-peer PoCUS curriculum using patients with ultrasound detectable pathologies appears effective. Such approaches may help Canadian IM programs answer increasing PoCUS educational needs.

100 Cultivating belonging and connectedness to an academic community: Evaluation of a clinician teacher peer mentorship/ community of practice group in a large department of psychiatry

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Background: Clinician teachers occupy crucial roles, in teaching residents, yet often face inadequate mentorship in developing their academic careers. Peer mentorship/communities of practice (CoP) offer an alternative model of support. Literature on peer mentorship/CoP focuses on clinician scientists with little attention to clinician teachers. A needs assessment in our Department of Psychiatry showed clinician teachers felt isolated/had less mentorship access. To address gaps in mentorship in faculty development, and local gaps, we implemented/evaluated a clinician teacher peer mentorship/CoP.

Methods: A clinician teacher mentorship/CoP was launched in June 2022 for psychosocial support, professional identity formation, and skill development. Group process and content self-evolve, co-facilitated by mid/senior and junior faculty. Sessions are virtual, offered monthly. Content included promotion, feedback, negotiation/self-advocacy, supporting trainee wellness. Process incorporated best practices; sessions were interactive, incorporating adult/case learning. Evaluation of participant experience involved quantitative surveys/qualitative interviews. Surveys included closed/open questions, administered 1 year post. Descriptive statistical techniques were used for survey data analysis, open questions/interviews were analyzed thematically.

Results: Clinician teacher mentorship/CoP reached 96 faculty through 20 sessions. Participant numbers varied from 3 to 23/session. Sessions were well-received; participants "strongly agreed/agreed" format was interesting/engaging (95%), group program was excellent (95%), greater sense of connectedness to academic community (84%), improved understanding of career needs (79%), supported academic life/learning new teaching strategies (95%). Qualitative data showed faculty valued: sharing of experiences, validation; role socialization, format/leadership.

Discussion: Peer mentorship/CoP for clinician teachers can provide safe environment to improve faculty's understanding of career needs, academic role, and promote sense of connection to their academic community.

101 Still implicit one year later? Evaluation of faculty-wide unconscious bias training one year following implementation

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Background: Faculty development in equity, diversity, and inclusion (EDI) faces many challenges, one of which is demonstrating whether trainings can result in sustained changes in behaviour, attitudes, and in turn, practice. This study evaluated whether and how mandatory unconscious bias workshops for Department of Psychiatry faculty, including clinician teachers supervising residents, affected behaviour and practice one year later.

Methods: Our aim was to evaluate the impact of the workshops 12 months after implementation by assessing behaviour and/or practice changes, if any. This qualitative study is informed by Mezirow's Transformative Learning Theory and Critical Realism frameworks. Twelve faculty members participated in one-hour semi-structured interviews to discuss the workshop's impact on their behavior, workplace, and self-awareness regarding equity issues. A purposive sampling strategy ensured diversity in gender and career stages. Inductive and deductive coding were applied to analyze data through a process of collaborative thematic analysis.

Results: Preliminary findings indicate that participants appreciated the workshop, with those less experienced in equity topics showing increased commitment to self-reflection and behavioral changes. Nearly all acknowledged their own unconscious biases and committed to ongoing self-reflection, with interest in periodic refreshers to maintain their learning.

Conclusions: Educational scholarship focused on Kirkpatrick Levels 3 and 4 (i.e., Behaviour and Results) are limited. This project suggests factors that may contribute to sustained changes in faculty approaches to unconscious bias and EDI. The one-year post-workshop evaluation contributes increased understanding to potential key elements for designing interventions for faculty, including clinician teachers supervising residents, with longer-term impact.

102 Peer consultation program for teaching effectiveness

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Introduction: 38 % of full-time clinical faculty in the Department of Medicine (DoM) at University of Toronto (UofT) are Clinician Teachers (CTs). This pilot study assesses the need for and acceptability of a Peer Consultation Program for Teaching Effectiveness to improve teaching excellence among CTs responsible for training medical learners.

Methods: This study involved five faculty members trained in the Master Teacher Program (DoM's two-year instructional development certificate course) as Peer Consultants (PCs) and ten staff physicians with minimal/no formal teaching training as CTs. Each PC was paired with two CTs, forming 10 pairs. The process included a pre-consultation phone call, PCs observation of CT-led small group teaching seminars, PCs offering formative feedback on the provided worksheet, and a post-observation phone call. All participants completed a survey, three months later.

Results: All 10-pairs completed their teaching observations. On a 1-5 scale, with 1- "strongly disagree" and 5 - "strongly agree," CTs were evaluated by PCs as being most effective at treating learners with respect (mean: 5; standard deviation [SD]: 0), demonstrating appropriate knowledge of the topic (mean: 5; SD: 0) and demonstrating enthusiasm (mean: 4.90; SD: 0.32). CTs need improvement with stating teaching objectives at the beginning of the session (mean: 4.30; SD: 0.95), conducting the session at an effective pace (mean: 4.56; STDV: 0.53), and using summaries, repetition and/or "take home" points (mean: 4.67; SD: 0.71). In the follow-up surveys participants found the peer consultation process helpful (mean: 4.14; SD: 0.69), appreciated the formative nature of the program (mean: 4.71; SD: 0.49), and express a need for a permanent peer consultation program (mean: 4.29; SD: 0.49).

Conclusion: Peer consultations with formative feedback are a helpful resource to improve CTs teaching abilities. We plan to expand this project into a permanent Peer Consultation Program for Teaching Effectiveness, with ongoing evaluation and refinement.

103 Mentors' and mentees' perspectives: Preliminary evaluation of a Department-wide Mentorship Program in Psychiatry

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Introduction: The Department of Psychiatry has launched a Mentorship Program since September 2021 as part of its 2020-2026 strategic plan to facilitate sharing of expertise, self-reflection, and career growth among junior and senior faculty members. A program evaluation strategy using self-administered online questionnaires is integrated in the Mentorship Program. The objective of this project was to conduct a short-term evaluation (i.e., in Year 3 of the Mentorship Program in 2024) to assess program uptake, collect feedback and experience of mentors and mentees in the Department's Mentorship Program.

Methods: Two parallel online questionnaires were developed, one for mentors and one for mentees. The inclusion criterion required participation in the Mentorship Program for at least six months. Both questionnaires collected data on key areas, including professional characteristics, mentorship experience, goals and expectations with the Mentorship Program, wellness and work-life balance, equity and diversity, and personal demographics.

Results: Feedback was obtained from 28 mentors and 29 mentees who were generally satisfied with the Mentorship Program in key areas surveyed. To 89% mentors, their expectation with the Mentorship Program was to facilitate career growth of more junior faculty; and to 74% mentees, their mentorship goal was to gain career guidance and to expand their professional networks. Mentors reported that lack of time was the most common challenge.

Conclusion: By gathering insights from mentors and mentees, the Department of Psychiatry can improve the overall delivery, resources, training, and tools, as well as ongoing program evaluation of the Mentorship Program.

104 Targeted faculty development to improve teaching performance and student learning outcomes for a low-fidelity interactive simulation seminar in psychiatry

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Introduction: The Deteriorating Patient Scenario (DPS) is a low-fidelity simulation for pre-clerkship medical students. It requires faculty tutors to simultaneously deliver the simulation through role-play and narration while guiding the students by setting the stage, moderating the intensity, and debriefing the experience. Owing to the demands and expectations placed on the DPS tutors, faculty development is essential for its success. The objective of this project was to assess the impact of a targeted faculty development (TFD) in response to student evaluations of the DPS seminar and faculty tutors.

Methods: In the 2021-22 academic year, a TFD approach was adopted for the DPS seminar based on student feedback from previous years. Identified TFD needs included setting clear learning objectives, ensuring the psychological safety of the learning environment, and outlining the DPS debrief process. Student evaluations of the DPS seminar and faculty tutors were collected using 5-point Likert scale items. Pre- and post-TFD learner feedback was compared through a t-test.

Results: Medical students provided 145 evaluation responses for the DPS curriculum between 2019-2024. Student evaluations of the DPS seminar and the faculty tutors significantly improved after the 2022 iteration when the TFD was implemented (3.95 vs 4.65, $p < 0.001$). Qualitative thematic analysis of student evaluations also showed positive changes in learner comments pertaining to the identified TFD areas of focus.

Conclusion: This project shows that a TFD approach can be initiated by learner evaluations to address specific student learning needs of the DPS curriculum. Its effectiveness can also be measured and reflected by the change in students' self-reported learning outcomes and faculty tutors' teaching performance, leading to improved curriculum delivery and teacher evaluation. A similar approach may be considered for curriculum and faculty development in residency education.

105 Building connection through multi-source feedback: Implementing a 360-degree feedback framework for Program Directors

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Introduction: Multisource (or 360-degree) feedback (MSF) approaches use input from diverse sources to evaluate individual performance. Originally developed for corporate settings, MSF has gained popularity in medical education and has been recommended by the Royal College of Physicians and Surgeons as a feedback mechanism in Competence by Design. While its benefits and challenges for residents and physicians have been documented, its application to the program director (PD) role - a complex leadership position with broad responsibilities - remains underexplored. The PD role is well-suited to MSF due to its multifaceted accountabilities.

Methods: An MSF tool was adapted from an existing provincial health organization survey to evaluate 10 key aspects of the PD role (e.g., program development, resident support, collaboration). Each PD identified at least six respondents, including their department head, program administrator, and chief resident. PDs also completed self-assessments. Feedback was collated and shared with the PD and postgraduate dean. Individual follow-up meetings were held to discuss survey results, and a summary letter was sent to division/department heads to outline the process, results, and advocate for potential supports.

Results: A total of 64 PDs participated, with 3–11 respondents per PD ($M=5.8$, $SD=1.3$) completing the survey alongside self-assessments. PD self-assessments were consistently lower than peer ratings (paired samples $t=5.19-11.83$, $p<.001$). Open-text feedback highlighted strengths, including resident advocacy, communication, and teamwork. Common areas for improvement included time management, work-life balance, and conflict resolution.

Conclusion: Information gleaned from this MSF process was useful to PDs, division heads, and the postgraduate medical education office. PDs expressed that feedback provided was useful and constructive and that meeting to debrief with the postgraduate dean to discuss the feedback, elaborate on resource needs, and strategize for improvement was deeply valuable. Learnings derived from the initial administration of this large-scale performance improvement strategy will be discussed.

106 E-Learning evolution: Development of a self-directed STACER examiner training module for Faculty in Psychiatry

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Background: Successful completion of Structured Assessment of Clinical Evaluation Report (STACER) examinations is a required component of general psychiatry residency training in Canada. The purpose of the STACER is to assess residents' ability to acquire a comprehensive history from a patient, evaluate their current mental state, interpret the acquired information, and arrive at a diagnosis, formulation, and management plan. However, examiner training is key to ensuring consistent processes and the minimization of bias, thereby improving the reliability and validity of these exams.

Methods: The Department of Psychiatry's Office of Faculty Development at the University of Toronto, in collaboration with the General Psychiatry Residency Program and with the support of a STACER Training Working Group, undertook a redesign of STACER training for faculty teachers with the goal of developing and evaluating a STACER Training e-module.

Results: The STACER Training Working Group — composed of faculty and resident representatives — conducted a review and update of previous STACER training materials, then adapted the content into a self-paced e-module format to make it accessible to faculty on demand. Additional resources (FAQ and Examiner Tip Sheet) were also developed to support faculty knowledge and skills. Feedback from an initial pilot was incorporated before the e-module was launched across the Department.

Conclusion: As of September 2024, 94 participants had enrolled and 50 had completed evaluation surveys. The e-module was extremely well-received, with the vast majority of respondents (98%) indicating it fulfilled its goal. Feedback obtained through open-ended responses will be applied to iteratively improve the training, to support dissemination on a broader scale.

107 Making meaning or the illusion of control? How selection committees reconcile data and negotiate priorities during rank meetings

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Background: Residency selection committees must devise rigorous and defensible processes to compare and rank applicants with incomplete, biased, or otherwise flawed information. We sought to gain a deeper understanding of how selection committees grapple with and negotiate tensions and competing priorities in crafting their final rank list.

Methods: We conducted a multiple case study of 5 residency selection processes to examine how selection committees formulate their final rank lists. Data collected included an initial interview with the PD of each program, documents used in the application screening process, observations of rank meetings with field notes, and follow-up interviews with selection committee members. Thematic analysis was performed using an inductive approach.

Results: Determining the final rank order is a complex, multi-layered, and effortful process that involves consideration of not both formal and informal or undocumented influences. Various forms of argumentation were observed to move applicants. These often prioritized the personal knowledge and preferences that individual committee members brought to the discussion, leaving its participants on unequal footing. That led to idiosyncratic weightings of different factors for different applicants and could cause frustration with individual decisions when bias was detected or one's own arguments were less influential. Participating in generating the final rank list did, however, give committee members a sense of control in a system where they have very little actual control over the outcome.

Conclusion: The overt focus of the selection process was on the individual committee members' and programs' priorities above all else. This process was prone to individual and collective group bias. What was not attended to in the meetings but was perceived as an important component of the decision-making process was the diversity of the applicants. What was neither observed nor discussed was an applicant's preparation to perform the job of an EM resident and care for their future patients.

108 Modelling impact of gender on the UK surgical training application process: Findings from a national cohort study

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Introduction: Despite women comprising the majority of UK medical students, gender disparities persist in specialty training. These are especially pronounced in surgical training. Here, gendered cultural norms, socioeconomic status, ethnicity, age, and prior academic attainment may influence decisions to apply and subsequent success in postgraduate training. Centralised and standardised postgraduate recruitment process have been implemented in an effort to address potential bias. However, it is unclear if gender-bias persists in the recruitment process. We thus aimed to model, and compare, the application process for men and women applying to UK surgical training.

Methods: Data were accessed via the UK Medical Education Database (UKMED). We accessed deidentified data on doctors applying to [PT2] Core Surgical Training from 2012 to 2020. Using multivariable, multilevel logistic regression and path analysis we modelled the relationships between gender and the likelihood of being offered a training post. Both raw (unadjusted) and odds adjusted for educational factors including prior academic performance. We also explored the potential role in other sociodemographic variables in mediating any of the observed by gender.

Results: Data were available for 9885 applications by 7695 doctors. Women constituted 37% of applicants and 38% of successful applicants. Preliminary results will explore whether selection processes show evidence of direct or indirect (i.e. mediated by secondary variables) gender bias.

Conclusion: This study will provide critical insights into how gender and intersecting demographic factors affect the chances of success at application to surgical training. By identifying potential barriers and moderators, our findings will inform policies aiming at equitable selection processes that and promote diversity in surgical specialties.

109 Identifying barriers to physician recruitment in a rural Canadian region

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Introduction: Recruiting physicians to practice in rural regions has been a long-standing challenge in Canada. Traditionally, incentives such as rural retention premiums and loan forgiveness have been used to engage physicians. However, as gaps in healthcare widen in rural Canadian settings, shifting focus to the barriers to physician recruitment will provide valuable insight and thus strategies to address this issue. The aim of this study is to identify primary barriers to physician recruitment as well as mitigation strategies in a rural Canadian region.

Methods: A survey was distributed to 55 military physicians practicing in a rural Canadian region, aiming to identify perceived barriers to rural practice. Each respondent selected five perceived barriers from a predefined list, including an open-ended "other" option (personal/family considerations, professional isolation, infrastructural deficits, and financial incentives). They then subsequently rated the effectiveness of potential strategies to mitigate these barriers on a five-point Likert scale (1=strongly disagree, 5=strongly agree). All respondents were family physicians who actively practice in rural areas.

Results: Personal/family considerations (58%) were the primary barrier to recruitment, followed by perceived professional isolation (18%), infrastructural deficits (15%), and a lack of adequate financial incentives (15%). Recommendations for mitigation included further financial incentivization (63%) and a guarantee for enhanced work-life balance (36%).

Conclusion: Barriers to recruitment in rural regions reflect a combination of social, financial, and infrastructural challenges, consistent with prior studies (Khan et al., 2021; Mathews et al., 2020). This study highlights personal and family considerations as the most significant barrier, suggesting future interventions should incorporate family-centered supports alongside financial incentives. The major limitations of this study are 1) the use of a predefined list of barriers, and 2) participants who are already engaged in rural practice. Future studies should explore barriers using an open-ended question design, e.g., interviewing, and must also engage participants in non-rural settings.

110 Reliability of a CanMEDS scoring rubric for assessment of applications to a Canadian physical medicine and rehabilitation residency program

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Background: Medical students apply to the Canadian Residency Matching Service (CaRMS) to obtain a residency spot. There is variability in the application packages from different students, hence applications must be evaluated using objective measures to select candidates for interviews. A scoring rubric using the CanMEDS framework was developed by the University of Alberta Physical Medicine & Rehabilitation Program to reduce assessors' variability. The purpose of this study was to evaluate this rubric through inter-rater reliability and user experience.

Methods: This study utilizes a mixed methods design. The first quantitative component assessed multiple raters' consistency through intraclass correlation coefficients (ICC). Secondly, a user experience survey was analyzed to understand the usability of the rubric (2022-2023 cycle). The analysis of the qualitative portion was completed using a reflective thematic analysis. Based on these results, improvements to the rubric were implemented for the 2023-2024 CaRMS cycle. The final component involved a follow-up survey to understand the impact of the changes.

Results: Medical Expert, Professional, Collaborator, Leader and Health Advocate domains in the CanMEDS rubric demonstrated moderate reliability (ICC 0.5 -0.75). Scholar and "Knowledge of specialty" demonstrated good reliability (ICC 0.75 – 0.9). Communicator domain had poor reliability (ICC < 0.5). In the quantitative survey, results suggested that the rubric is "easy" to use, and valid for interview selection. Additionally, participants identified "individual categories" and the ability for "standardization" as the most useful feature of the rubric. Following changes to the rubric in 2023-2024, participants found four categories easier to score, including Professional, Leader, Service to the community (Advocate), and Scholar.

Discussion: Our study shows that the CanMEDS scoring rubric is user friendly, reliable and valid to select candidates for interviews. Updates to the rubric improved usability, however further analysis and improvements in reliability are required as a next step.

111 Surveying selection criteria, requirements, and challenges surrounding residents' knowledge of French at a large French-speaking university in Canada

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Introduction: Unlike other Francophone medical faculties, Université de Montréal residency programs lack standardized French proficiency requirements. This study examines French proficiency-related challenges among candidates and residents and explores potential minimal proficiency standards.

Methods: Université de Montréal residencies' selection criteria regarding French knowledge were gathered from the Canadian Resident Matching Service (CaRMS) website. Program directors were surveyed on previous French proficiency-related challenges with candidates or residents, their program's language criteria, and their perception of the minimal level of French that should be required. Responses were categorized by verbal and written comprehension and expression.

Results: From CaRMS website review, 54/59 (91.5%) programs required an only French-language application. 5/5 (100%) Family Medicine/Enhanced Skills programs standardised their language requirements through either previous studies in French or a standardised test, along with an interview criterion. French proficiency evaluation and requirements varied more with programs in other matches. Only 3/26 (11.5%) PGY-1 residency programs used such criteria, with 18/26 (69.2%) at least explicitly requiring documentation in French or evaluating French proficiency during the process. Only 4/15 (26.7%) medical and 3/13 (23.1%) pediatric subspecialty programs explicitly required some level of French proficiency. From survey responses, 30 program directors revealed that 16/30 (53%) encountered French proficiency challenges with candidates, particularly during interviews. 8/30 (26.7%) reported having had such challenges with residents, mostly involving verbal comprehension or expression. 4 fellowship program directors answered the survey, with 4/4 (100%) reporting language-related challenges among candidates, and 3/4 (75%) among fellows. On average, program directors desired minimal proficiency between B2 and C1 based on the Common European Framework of Reference for Languages (CEFR), with higher emphasis on comprehension than expression.

Conclusion: The results suggest a need for more rigorous French proficiency evaluation for candidates to hopefully reduce language-related challenges among residents. Adopting standardized CEFR-based criteria may help ensure adequate French proficiency among residents.

112 This abstract has been withdrawn.

113 Hand in hand: A support program for parent trainee well-being

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Introduction: As the number of trainees having children during residency has increased, so has the need for residency programs to support trainee parental well-being. Cultivating community and providing support have been shown to improve well-being. The Hand-in-Hand program at Baylor College of Medicine (BCM) is a resident-led program aimed at 1) building community among trainee parents, 2) supporting trainees during transition to parenthood, 3) providing lactation resources, and 4) advocating for parent trainees. The objective of this study was to assess the Hand-in-Hand's impact.

Methods: The Hand-in-Hand program hosts quarterly child-friendly events, offers a support-focused group chat, and distributes monthly newsletters featuring family-friendly activities for parent trainees at BCM. Hand-in-Hand offers various resources for parent trainees, including a guide for new intern parents, meal trains, care packages, mentorship, lactation support, and advocacy efforts.

In September 2024, a 25-item survey with both quantitative and qualitative questions was sent to all current and former participants to assess the program aims and the helpfulness of support resources. We summarized the data using descriptive analysis, and coded qualitative responses through an iterative, inductive process and identified themes.

Results: Hand-in-Hand has grown from 10 to 46 trainees from 2022-2024. The survey's response rate was 46% (21/46). Overall, trainees were satisfied by the support offered by Hand-in-Hand, with most respondents strongly recommending similar peer support groups to other training programs ($M = 4.48$, $SD = 0.68$). Most trainees agreed that Hand-in-Hand met its aims and among offerings rated for helpfulness, the top three were the lactation room, meal trains, and the group chat.

Conclusions: Hand-in-Hand successfully met its objectives, providing valuable support to parent trainees at Baylor College of Medicine. These findings underscore the importance of peer support programs for parent trainees and offer insights for medical educators to better support the evolving workforce.

114 Enhancing cultural sensitivity in medical education through a novel immersive arts-based student-led initiative

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Background: Cultural sensitivity is essential in medical education to prepare future physicians to serve the needs of diverse patient populations. Existing literature emphasizes the role of interactive and experiential methods in developing cultural sensitivity (Majumdar et al., 2004; Rukadikar et al., 2002). "Threads: A Cultural Mosaic" was an innovative, student-led cultural fashion show at the University of Toronto's Temerty Faculty of Medicine, aiming to enhance the development of cultural sensitivity by providing a platform for cultural expression among medical students.

Methods: Grounded in narrative medicine and social accountability frameworks, "Threads: A Cultural Mosaic" combined artistic expression with medical education. The initiative included pre-event photoshoots of medical students in cultural attire with medical instruments and clothing drives. Event day showcased an electronic pamphlet featuring medical student narratives about their culture, live student-led cultural performances, food from local ethnic eateries with educational descriptions, and a collaborative art project. Qualitative feedback was collected from all participants and analysed for emergent themes.

Results: "Threads: A Cultural Mosaic" attracted 124 undergraduate medical students and raised \$3,000 for a global humanitarian organization, demonstrating strong community engagement. Analysis of qualitative feedback indicated that participants experienced increased comfort with cultural expression and a heightened awareness of cultural diversity. Participants reported enhanced cultural sensitivity, appreciated the incorporation of their cultural identities into their professional development and expressed interest in further opportunities for cultural learning within the medical curriculum.

Conclusion: "Threads: A Cultural Mosaic" effectively contributed to the development of cultural sensitivity among medical students by providing an immersive experience for cultural expression. This innovative approach suggests that incorporating artistic and experiential learning activities can enrich medical curricula and fosters an inclusive medical education environment. The project highlights the potential for student-led initiatives to impact medical education positively and prepare future physicians for equitable healthcare delivery.

115 Development of instructional modules to facilitate the implementation of shared practice standards for religious attire worn by individuals working in hospital areas with sterile procedures

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Introduction: Healthcare workers who wear religious attire—such as a hijab, tichel, or turban—face workplace discrimination when their attire conflicts with workplace practices. The Toronto Academic Health Science Network (TAHSN) has approved a set of shared practice standards for religious attire worn by health care workers, learners, and volunteers who work in hospital areas with sterile procedures (ASP). The primary aim of this project was to develop instructional modules that visually demonstrate these shared practice standards. Secondly, the impact of these modules will be studied in medical learners.

Methods: Operating room healthcare professionals (n=4) provided information and ensured accuracy regarding dress code and scrubbing procedures. Scripts and storyboards for the instructional modules were developed under expert guidance using a scholarly framework. Volunteer actors (n=3) of Muslim, Sikh, and Jewish faith were recruited with informed consent. Videos were filmed and edited by experts in educational video development. The final modules were provided to TAHSN hospitals and the Temerty Faculty of Medicine for dissemination. Standardized questionnaires are being developed to evaluate pre- and post-viewing procedural knowledge and perceptions of inclusivity.

Results: Three instructional modules were developed outlining scrubbing, donning, and doffing processes for Muslim, Sikh, and Jewish individuals wearing religious attire in hospital ASP. The instructional modules have been shared on the official TAHSN YouTube channel and on posters with QR codes outside TAHSN affiliated hospital operating rooms.

Conclusion: These instructional modules serve as a standardized resource that can be adopted in a variety of clinical settings for health professionals' education and workplace orientation. This educational tool will promote safe and equitable environments for individuals from diverse backgrounds working in healthcare. Future directions include conducting a qualitative study to investigate the impact of these videos on procedural knowledge and perceptions of inclusivity amongst medical learners.

116 This abstract has been withdrawn.

117 Deciphering the code to psychologically safe on-call learning environments within the University of Ottawa psychiatry residency program: A mixed method, learning health system co-design approach

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Introduction: A shared team belief that it is absolutely acceptable to make mistakes and to speak up if mistakes are made is critical to a psychologically safe learning environment. This belief can be incongruent to service- and efficiency-focused high volume on-call learning environments.

Methods: A resident-driven, participant learning health system (LHS) co-design was structured around multiple focused group discussions using 10-min peer-reviewed presentations on psychological safety with 65 psychiatry residents across post graduate year (PGY) 1 to 5 followed by protected time to complete an anonymous survey using the Psychological Safety Scale (PSS). Additional questions on learning behaviours and antecedents to psychological safety (PS) were included. Quantitative data was supplemented by qualitative data collected anonymously through 6 open-ended questions analyzed subsequently using reflexive thematic analysis.

Results: 33 psychiatry residents completed the PSS and the associated questions and 24 responded to the qualitative open-ended questions. Psychiatry residents shared that it is not safe to take risks and it is difficult to ask questions while on-call compared to other clinical settings (PSS mean score < 4.0, $p < 0.05$). Quantitative analysis of learning behaviors and antecedents to PS suggested low scores on reflective learning time and team adopting a collective responsibility and innovative/nonconformist approach while on-call. Qualitative analysis pointed towards a service-driven learning culture, marked by preceptor-dependent variability in feedback and structural inequity-informed power imbalance. Multicomponent innovative interventions informed by this data were aimed to embed equity partnerships between staff and residents to help continuously assess psychological safety in the on-call learning environment.

Conclusion: Limited by the non-linear relationship between psychological safety and team performance, this LHS co-design helps balance service and learning goals while on call and addressed important accreditation parameters of the University of Ottawa psychiatry residency program.

118 Spiritual well-being of resident physicians: A narrative inquiry study

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Introduction: Spirituality is an intrinsic aspect allowing individuals to make sense of their world, contributing to deeper well-being. Spiritual care is an important aspect of physician care, especially within palliative medicine. Many studies have aimed to quantify spirituality in the medical context. However, to our knowledge, few qualitative studies explore the meaning resident physicians ascribe to spirituality during their medical training. We aimed to understand spirituality from the resident physician perspective during their training and its impact on their sense of well-being.

Methods: We adopted a constructivist theoretical frame and used narrative inquiry (NI) methodology. A semi-structured interview guide with questions pertaining to personal spirituality was used to interview resident physicians at University of Calgary residency programs. Interviews were conducted by videoconference or by phone. Convenience sampling was used. Interviews were audio recorded and transcribed. At least two members of the research team did independent coding to determine final themes and threads.

Results: A total of 13 resident physicians (ranging PGY1-PGY5; 8 identified as women, 5 identified as men) attending various residency programs at the University of Calgary were interviewed. Residents expressed spirituality through: 1) personal identity; 2) relationships with others, including patients; and 3) end-of-life care. Two common threads across narratives included residents expressing a lack of time as a limiting factor to practicing spirituality for well-being and a lack of acknowledgement for spiritual well-being within wellness programs.

Conclusion: Understanding the meaning that residents ascribe to spirituality could influence wellness services offered to residents. Our findings may support the addition of protected time and peer mentorship resources to support spiritual well-being of resident physicians. A limitation of this study is it was conducted at a single site. In the future, quantitative studies could survey the amount of resident physicians in Canada who see the need for spiritual well-being support.

119 The misunderstood Anesthesiologist: A prospective cohort study comparing the effectiveness of educational media in Preoperative Assessment Clinics

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Introduction: Preoperative Assessment Clinics (PACs) play a vital role in the anesthetic education of patients, increasing patient satisfaction, facilitating discussion, and easing the cognitive burden of retaining medical information. Despite attempts to improve patient anesthetic education, knowledge retention is often poor, especially regarding patient understanding of the roles of anesthesiologists. This study investigates the impact of educational multimedia on anesthetic knowledge retention in PAC patients.

Methods: Data was collected at the Saskatoon City Hospital PAC over 3 months. Participants included adults attending PAC visits for elective surgery and excluded patients unable to complete a post-operative survey within two weeks of their surgery. The control group received standard verbal education, and three interventional groups received verbal education with either written, audiovisual, or website-based education. Surveys tested patients' understanding of anesthesiologists' roles at three time points: pre-PAC, post-PAC, and up to two weeks post-surgery. Generalized linear mixed model regression was used to determine if study arm and testing time were significant predictors of the rating for each question and percentage of questions answered correctly, controlling for age, gender, and level of education.

Results: Pre-PAC, post-PAC, and post-surgery surveys were completed by 196, 70, and 33 patients, respectively, yielding an overall retention rate of 17%. There was no significant difference in total score percentage between study arms ($p=0.439$); however, both post-PAC (Least Square Means [LSM]=70.5, $p<0.001$) and post-surgery (LSM=68.4, $p<0.001$) total scores were higher than pre-PAC (LSM=57.6). Anesthesia-related anxiety also significantly decreased from pre-PAC (LSM=3.8) to post-PAC (LSM=3.0, $p=0.008$) in all study arms.

Conclusions: PACs remain important in conveying anesthesia knowledge to patients and reducing their anesthesia-related anxiety regardless of educational format. A major limitation of the study was a low retention rate. Additional research involving rural patients would be valuable given their limited ability to receive educational materials in-person before surgery.

120 An evaluation of the McMaster University Clinician Educator program through the lens of eco-normalization

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Background: The Clinician Educator (CE) Areas of Focused Competence (AFC) program, launched at McMaster University in 2014, is a competency-based, time-variable, portfolio-driven nationally accredited continuing professional development program aimed at professionalizing medical education. It was the first program of its kind in Canada. Despite its success in graduating dozens of clinician educators and fostering leadership development, the program's integration within our local ecosystem remains variable.

Methods: Using the Eco-normalization framework, which examines how innovations embed within systems through interactions between individuals, the ecosystem, and the innovation itself, we conducted a program evaluation to understand the CE program's establishment and integration within McMaster University's medical education community. A qualitative program evaluation employed reflexive thematic analysis with purposive and snowball sampling to identify key stakeholders, including 25 learners, program leaders, and faculty members across institutions. Semi-structured interviews explored interactions between the CE program, the broader system, and participants. File reviews of program participants examined outcomes and alignment with program goals. Data were analyzed for patterns of integration success and barriers within the school of medicine's clinical departments.

Results: Integration success was heterogeneous across departments. In well-integrated departments, alignment between institutional goals and individual motivations facilitated successful embedding of the program. Benefits included professional development, community building, leadership capacity, and curricular innovation. These outcomes reinforced a pipeline for future recruitment and program sustainability. In less successful departments, barriers such as insufficient resources, lack of recognition, and weak institutional sponsorship disrupted the alignment of purpose, motivation, and outcomes. Program strengths included its flexible structure, access to a supportive community, and practical applications, all of which aligned well with stakeholder goals.

Conclusion: Eco-normalization reveals critical factors necessary for integrating the CE program into a complex academic system. Addressing resource gaps and enhancing institutional sponsorship could bolster program success and sustainability across diverse ecosystems.

121 Mentoring during specialty training the specialty trainees' perspective and experiences survey

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Background: Mentorship has been described as an approach in which a highly experienced, respected, and empathic individual (the mentor) helps a younger individual (the mentee) develop and reexamine his or her ideas, learning, and personal or professional development. Several studies have demonstrated the benefits of mentoring for not only mentees but also mentors and organizations. In the context of mentoring in medical education, limited literature examined trainees' mentoring experiences and perceptions of its effectiveness.

Objectives: The study objectives were to investigate residents perspectives and experiences about mentorship during their specialty training at Oman Medical Specialty Board (OMSB), to address their needs of mentorship and to explore the faced challenges.

Methodology: This was a cross-sectional study, in which a link was emailed to all residents who are enrolled in all programs at OMSB which lead them to the study questionnaire. The data collected and managed using SurveyMonkey.

Results: Among 718 residents, 464 responded to the questionnaire (response rate 64.6%). 51% of respondents reported access to at least a mentor. In specialty training, 75% of respondents perceived mentors as helping them meeting academic goals and 63% of respondents perceived mentors as providing career opportunities. (75-85% of all respondents) agreed that the top three most common challenges of mentorship programs are: time availability, lack of skilled mentors and having mentorship programs without formalized objectives.

Conclusion: Our study demonstrated the benefits of mentorship for the professional and social development of future physicians. Moreover, it highlighted the challenges and barriers to applying well-structured mentorship programs. To increase mentorship programs' effectiveness and overcome challenges, the research team suggested that OMSB allocate dedicated time for mentorship sessions and provide adequate training for mentees and mentors.

122 A systematic scoping review of medico-legal education studies: What are the trends and gaps in medico-legal residency education?

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Background/purpose: Patient complaints and legal matters involving residents and fellows in Canada are increasing, predominantly relating to diagnosis, documentation, disclosure and communication. These events can reflect patient safety incidents, and they cause significant distress for learners. This systematic scoping review explores the current state of medico-legal education within academic programs, to identify prevailing trends and existing knowledge gaps in medico-legal curricula, to further promote safe medical care.

Methods: We are conducting a systematic scoping review following Arksey and O'Malley's framework. We searched the Medline, Embase, CENTRAL, and ERIC databases, from inception until July 2024. To be included, studies must: (1) be empirical, (2) pertain to medical trainees, practicing physicians or physician educators, (3) involve non-procedural training, continuing professional development, or learning needs of medical trainees, and (4) be published in English or French. Title, abstract, and full-text screening were conducted in DistillerSR by two reviewers, with discrepancies resolved through discussion or with another reviewer. Data will be extracted and analyzed using qualitative thematic synthesis.

Results: Of the 4926 records screened, 157 full-text articles were screened for relevance. Eighty-four papers met final inclusion criteria, the majority (54.8%) pertaining to residency education. Most (59.5%) dealt with medico-legal training content, while 45.2% dealt with training gaps/needs. We are currently conducting data extraction and preliminary analysis reveals that few programs, either undergraduate or postgraduate, incorporate formal medico-legal curricula. Programs that do typically deliver it through multi-day workshops and electronic learning activities. Some of the knowledge gaps and training needs identified include documentation, transition to practice, and professionalism.

Discussion: Knowledge gaps and training needs persist in residency medico-legal education and improving these gaps may better support residents and supervising faculty by equipping them with tools to adequately prevent and manage patient safety incidents and medico-legal events.

123 Welcome to the Virtual Angiography Suite: A comprehensive online interventional radiology educational resource for residents

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Introduction: For many residents, initial experiences in an angiography suite may be daunting. There remains no standardized national interventional radiology curriculum for residents in Canada. Few medical schools in Canada offer elective rotations in interventional radiology and many residents in Canada do not receive direct exposure to interventional radiology during medical school. Moreover, there remain few interventional radiology educational resources for residents encompassing the various instruments of interventional radiology and key principles in the specialty.

Objectives:

1. Enhance learning opportunities for residents by providing a unique and immersive virtual environment;
2. Improve interventional radiology educational resources through filling a critical gap and improving the accessibility of available interventional radiology educational resources for residents; and,
3. Facilitate career exploration by increasing residents' exposure to interventional radiology.

Methods and results: In collaboration with the Canadian Association for Interventional Radiology, we developed a comprehensive online interventional radiology educational resource for residents. The Virtual Angiography Suite comprises two components. First, using Matterport technology, which encompasses 3 dimensional cameras and a virtual tour software platform, we developed an immersive virtual environment allowing residents to explore a virtual angiography suite. Second, completing a structured review of published literature, we curated information on the various instruments of interventional radiology and key principles in the specialty that residents are able to access as they navigate through the virtual environment. This curated information encompasses puncture needles, catheters, wires, sheaths, stents, fluoroscopy techniques, radiation safety and more. The Virtual Angiography Suite is accessible remotely through the Canadian Association for Interventional Radiology webpage and is available to residents worldwide.

Conclusion: The Virtual Angiography Suite is a comprehensive online educational resource for residents. This educational resource promotes excellence in interventional radiology education and positively contributes to the successful ongoing growth of the specialty.

124 Using CGS-CME journal as a Geriatric Medicine Education resource: Exploring perspectives of Program Directors and residents

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Background: Delivering high-quality healthcare for older adults requires mastering the competencies within the Geriatric 5Ms© framework, which demands diverse educational resources. The Canadian Geriatrics Society Continuing Medical Education (CGS-CME) journal provides peer-reviewed, open-access content covering many geriatric medicine training competencies and supports preparation for the Royal College Geriatric Medicine Certification Exam. While this journal is a recommended resource for the certification exam, its role in addressing training competencies and enhancing exam success remains unclear. This study explores Canadian Geriatric Medicine residents' and program directors' (PDs) perceptions of the journal to identify areas for improvement in content and utility.

Methods: A mixed-methods study will be conducted. Online surveys will be sent to all Canadian Geriatrics PDs and residents, complemented by in-depth interviews with selected respondents. All interviews will be transcribed verbatim and analyzed using inductive thematic analysis.

Results: A preliminary review of the published CGS-CME articles from 2011-2024 compared Geriatric Medicine Royal College training competencies which shows the journal addresses about 70% of training competencies, with a strong focus on the CanMEDS Medical Expert role, including topics such as chronic disease management, safer prescribing, and dementia-related driving assessments. We also identified gaps in the "What Matters Most" and "Mobility" domains of the Geriatric 5Ms© framework, which are critical for quality-of-life care. Coverage of the CanMEDS Advocate, Professional, and Leader roles is also limited, despite their increasing relevance in elder care. A significant portion of the articles in this journal, specifically 37%, are authored by geriatrics residents.

Conclusions: Insights from ongoing research will inform strategies to refine the journal's role in geriatric medicine education, address content and competency gaps, which would make the journal a more robust certification examination and education resource.

125 CanMEDS framework in the era of Artificial Intelligence: Ethics at the intersection of technology and patient-centered care

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Introduction: Artificial Intelligence (AI) is rapidly transforming healthcare in Canada, raising complex biomedical ethical challenges that must be addressed in residency education. Promoting digital literacy by enhancing existing CanMEDS roles with AI-specific competencies is a priority. The intersection of AI-driven ethical challenges with the traditional four pillars of biomedical ethics (autonomy, beneficence, non-maleficence, and justice) represents an opportunity to address this gap. This study examines how biomedical ethics case studies can be utilized to teach AI-specific competencies while aligning with CanMEDS roles.

Methods: A comprehensive review of the CanMEDS framework was conducted to identify opportunities for incorporating AI-focused biomedical ethics into residency training. Case-based scenarios were developed to address ethical challenges related to AI, focusing on critical evaluation, ethical integration, and patient-centered decision-making. These cases were designed to teach how to navigate AI's potential biases, ensure transparency in decision-making, and protect patient privacy while fostering communication and leadership skills.

Results: A comprehensive analysis of case studies shows that AI and traditional biomedical ethics can work synergistically to form a strong CanMEDS-based framework from which learners can navigate the use of AI in clinical practice. We created a method to integrate core AI concepts, including informed consent, bias, patient safety, transparency, privacy, and fairness, into residency curricula with CanMEDS-aligned milestones. Scenarios will examine real-world AI applications, focusing on the ethics of diagnostic algorithms and the role of informed consent.

Conclusion: Integrating biomedical ethics case studies into residency education bridges critical gaps in the CanMEDS framework, equipping residents with the skills necessary to address the ethical complexities of AI-enhanced healthcare. This approach ensures that future physicians are not only proficient in technical competencies but also prepared to uphold the ethical standards of their profession. Future efforts will focus on the implementation of these case studies and evaluating their impact on residency training.

126 From trainee to clinician: National resident perspectives on navigating the final stage of Radiation Oncology training

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Introduction: The transition to practice (TTP) stage was developed to allow residents an opportunity to hone their clinical competencies and focus on clinical and non-clinical aspects of practising medicine in preparation for independent practice. Previous research identified several gaps in Radiation Oncology residents before independent practice including practice management, financial planning, and effective communication and collaboration with team members. This study evaluated the impact of TTP on addressing these gaps by understanding residents' perspectives and experiences just prior to embarking on TTP and within 6 months of graduating.

Methods: This study adopted a mixed methods approach with a pre-survey in Fall 2023 and 2024. The Qualtrics survey was circulated to postgraduate year 5 Radiation Oncology trainees in Canada. The survey included demographic items, Likert-type items, and open-ended questions. Quantitative data were analyzed descriptively using SPSS and qualitative data were analyzed thematically in NVivo.

Results: A total of 14 residents completed the pre-survey and 11 completed the post-survey. Before starting TTP, 69% residents agreed that they felt prepared for independent practice and 92% indicated that they were not comfortable with billing and business. Additionally, 54% indicated that they were comfortable running a multidisciplinary cancer conference. After TTP, 50% of residents indicated that they were not comfortable with billing or business whereas 100% of residents reported that they were confident in overseeing treatment planning and independently overseeing a patient's treatment. About 70% of residents reported that they were comfortable running a multidisciplinary cancer conference. Residents appreciated graduated responsibilities and longitudinal clinics in preparation for independent practice. After completing TTP, residents lacked confidence in on-board imaging, leading multidisciplinary conferences, triaging, and billing.

Conclusion: These findings suggest that TTP increased confidence and competence in areas such as treatment planning and independently overseeing a patient's treatment. However, important gaps must be addressed with future iterations of the TTP curriculum.

127 Utility of 3D-printed heart models of Congenital Heart Disease in Radiology Education

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Introduction: Congenital heart disease (CHD) affects approximately 1% of newborns globally, requiring early life-saving medical interventions. Accurate diagnosis is critical yet challenging due to CHD's intricate anatomy and variable presentations, often resulting in misdiagnoses, repeated diagnostic studies, and management delays. Traditional didactic imaging lectures may not adequately convey CHD's spatial complexity, highlighting gaps in radiology education.

Purpose: Given the increasing use of 3D-printing in medical education, we sought to determine whether interactive educational interventions improve residents' understanding of CHD and whether 3D-printed models offer advantages over 2D diagrams.

Methods: A case-controlled educational intervention study was conducted on a single day in 2024. All trainees received a traditional two-hour lecture covering segmental anatomy and cyanotic CHD. Trainees were grouped by level of training and randomly assigned to a control (using 2D diagrams) or intervention group (using 3D heart models) for a 30-minute hands-on lab. Four congenital lesions were reviewed using the assigned visual aids. Both groups completed identical pre- and post-lab quizzes.

Results: 27 trainees participated in the study: 2 medical students, 2 radiology fellows, and 23 residents. Both groups significantly improved scores following the interactive lab. The 3D group improved by 24% ($p = 0.0021$) and the 2D group improved by 21% ($p < 0.0001$). No significant difference was observed between groups.

Conclusion: Trainees' understanding of CHD improved significantly after a relatively short educational intervention, regardless of using 2D or 3D teaching aids. However, there was no significant difference between the groups receiving 2D and 3D teaching aids, suggesting that the mode of instruction (2D vs. 3D) was not as important as an interactive lab session. While 3D models hold promise for enhancing medical education, adequate time and resources are essential for their optimal use. Future research should explore extended exposure to 3D models to further assess their educational value.

128 Feedback in Laparoscopic Medical Education (FIL-Med): A randomized mixed method investigation

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Introduction: Laparoscopic skill training is challenging due to the complex nature of the task. There is heterogeneity in the literature with respect to the optimal method of delivering feedback to learners. We strive in this investigation to determine the impact of delayed video feedback versus real-time feedback on peg transfer time in laparoscopically naïve medical students.

Methods: Medical students from Memorial University of Newfoundland were recruited and randomized into delayed video feedback and real-time feedback groups. Participants completed a timed laparoscopic peg transfer task on study day 1 and 14. The delayed feedback group's performance was recorded, while the real-time feedback group received in-person feedback. Quantitative analysis was performed using descriptive statistics, paired and independent t-tests. Qualitative data was analyzed by the constant comparison method.

Results: Forty participants were included. Paired sample t-test showed a significant improvement in peg transfer time post-feedback ($p < 0.001$). Independent t-test showed no significant difference between the two groups ($p = 0.268$). The real-time feedback group showed a greater improvement in their average time to complete the task (70.3 seconds (SD: 50.13)) compared to the delayed video feedback group (59.9 (SD: 55.14)). Qualitative analysis showed a preference among surgically interested medical students for real-time feedback. Students receiving delayed video feedback noted the benefit of feedback delivered in isolation of task performance.

Conclusion: Feedback positively improved laparoscopic task performance. Real-time feedback may be superior to delayed video feedback, particularly in those who are hands-on learners and self-report a proclivity for surgical specialties.

129 Evaluating the impact of nuclear medicine trainees in Multidisciplinary Cancer Conferences: A single center survey-based study

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Introduction: Multidisciplinary Cancer Conferences (MCCs) are central to collaborative care, providing an opportunity for oncologists, surgeons, and other specialists to discuss complex cancer cases and make informed treatment decisions. The involvement of nuclear medicine trainees in these rounds potentially enhances both the educational experience and patient care by offering specialized expertise in nuclear medicine imaging. Therefore, a rotation dedicated exclusively to consults was established for the nuclear medicine trainees at The Ottawa Hospital, in which trainees are responsible for all consults, including presenting relevant cases in MCCs. This study aims to assess the impact of nuclear medicine trainees in MCCs.

Methods: Assessment was done through a survey of 73 healthcare professionals, including nuclear medicine specialists, trainees, and clinicians from other disciplines such as surgery, oncology, medicine, pediatrics, nursing, pathology, and radiology. The survey designed on MS Form with 13 mixed multiple choice, Likert, and open-ended questions.

Results: 79.1% of participants perceive nuclear medicine trainees as very or somewhat impactful on interprofessional collaboration, while 77.4% believe their involvement contributes positively to patient outcomes. Furthermore, 83.3% of respondents report that trainee participation is effective in enhancing clinical knowledge. However, challenges such as limited understanding of other specialties, time constraints or scheduling conflicts, limited clinical experience, and lack of confidence in presenting or participating were identified.

Conclusion: This study underscores the value of nuclear medicine trainees in MCCs, which is perceived positively from the participants in these conferences. The results highlight areas of strength and positive impacts on MCCs, patient outcomes, and learning opportunities for trainees. It also highlights challenging areas for further optimization, which could hinder the full potential of trainee involvement. Recommendations for improvement include increased mentorship, improved communication training specific to multidisciplinary teams, encouragement of active participation in case discussions, and better logistical support from staff during case presentations.

130 Introduction of a video recorded handover for residents on night shift

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Introduction: Doctors in training rotate through night shifts in hospital networks during which they simultaneously cover multiple subspecialty units they may not be familiar with. Handover has previously relied on written materials and informal verbal handover from prior residents of variable quality. The purpose of this intervention was to produce a consistent form of handover for each unit and trainee.

Methods: We describe an intervention in a quaternary hospital network where the novel approach of video recorded handover was implemented in February 2023. Each recording consisted of a 10 minute video handover of key information required by after-hours residents to fulfil their role in subspecialty units. This is a descriptive study on how the video recordings were designed, implemented and received by the doctors in training.

Results: This intervention was received by 128 doctors in training over the course of 2023 and 2024. The units these trainees serviced overnight included general surgery, plastics, facio-maxillary surgery, cardiothoracic surgery, interventional radiology, neurosurgery, ophthalmology, orthopaedics, vascular surgery, urology, ENT surgery, respiratory, endocrine, rheumatology, renal, general medicine, geriatrics, neurology, stroke, psychiatry, haematology, medical oncology, radiation oncology, palliative care, cardiology, infectious diseases, and gastroenterology. This included several statewide services: heart and lung transplant, cystic fibrosis, haemophilia, HIV, burns and trauma. Details on the intervention and its subsequent uptake are described.

Conclusion: This video handover intervention was easy to implement and accessible to all trainees despite being on night shift. The issues identified to increase engagement with the videos was to ensure adequate protected teaching time was allocated to its viewing. Although the content of video handover is specific to the health service, the concept of creating a video handover is applicable across institutions.

131 OncPathFinder: An Oncology career wayfinding activity

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Introduction: Oncologists must be able to find meaning and joy in their work in order to avoid burnout. Oncology trainees face a number of possible paths and career journeys. While having tools to navigate these decisions may help, available resources are often geared at the student level (selecting a discipline) and focus on “likes vs dislikes”, rather than on skills or encouraging open-ended thought as to the factors required for an individualised, sustainable career.

Consequently, we conducted a quality improvement initiative aimed at designing a tool (termed OncPathFinder) to help oncology trainees considering future career possibilities.

Methods: OncPathFinder was developed collaboratively by a senior and junior oncologist. The tool consists of thought-provoking questions designed to help trainees align their strengths, interests, and priorities with potential career opportunities in oncology. The initial set of questions was crafted based on the creators’ experience and expertise as mentors and mentees, as well as different components of available models and common coaching practices. Feedback was sought in iterations: with trainees locally at one centre, a second centre, via social media, and then from trainees and consultants via the American Society of Clinical Oncology (ASCO) community of practice.

Results: Adjustments to the tool were made at each stage in the feedback process. Key pieces of feedback included the wording of some of the questions and points, making the questions more relevant to the struggles trainees face, and the benefit anticipated for trainees. At its final iteration, OncPathFinder consists of 21 questions and is available

here:

<https://quizlet.com/954208903/oncpathfinder-flash-cards/?i=2nz266&x=1jqt>

Conclusion: OncPathFinder is a tool to help trainees select an initial career path within oncology by encouraging reflection on the things that matter to them. In addition to helping trainees in oncology, we hope this tool stimulates the development of similar tools in other fields.

132 Exploring imposter phenomenon in Pediatrics Residents and potential implications for patient care

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Background: Although imposter phenomenon was first described almost fifty years ago, it is only within the past decade that research endeavors have focused on examine the impacts of imposter phenomenon in physicians. Most studies focused on imposter phenomenon in physicians and medical trainees take a quantitative approach, examining the prevalence of imposter phenomenon and associations with burnout and mental health conditions. By better understanding the potential impacts of experiences with imposter phenomenon, we can determine whether educational interventions should be developed to mitigate these effects or target imposter phenomenon itself.

Methods: This interview-based study will explore how pediatric resident experiences with imposter phenomenon during medical training may impact approaches to medical decision making and patient care. Additionally, the study will explore the spectrum of experiences with imposter phenomenon during medical training and possible associations with prior academic and career experiences. Participants were recruited from the current pediatric residents in a single pediatric residency program who have completed at least one year of residency training. Prior to participating in the study interview, participants were asked to complete a survey collecting demographic information. The participants were also asked to complete the Clance Imposter Phenomenon Scale. Interviews were conducted one-on-one via a virtual videoconferencing platform in a semi-structured interview format. The transcriptions will then be analyzed for recurring themes. Data collection and analysis is currently ongoing but expected to be completed by April 2025.

133 Exploring curricular and assessment interventions in Gastrointestinal Endoscopy: A scoping review

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Introduction: Endoscopy is a vital skill for evaluation and management of the gastrointestinal tract in both gastroenterology and general surgery. Performance of endoscopy in a safe, effective and efficient manner is vital for all trainees and practicing physicians within these specialties. Historically, endoscopic training has applied an apprenticeship model of training; however, with the paradigm shift towards competency based medical education, the development of new technologies (e.g. simulation models) has become increasingly important to understand how these techniques can be used to teach and assess learners more effectively. This scoping review aims to explore the current educational and assessment interventions used for endoscopic training to better understand how training can be improved.

Methods: Eight databases were searched for articles from January 2015 to January 2024. Full text articles in English were included if they focused on education in endoscopy involving either gastroenterology or general surgery trainees. Advanced endoscopic procedures were excluded for this study.

Results: Of the 8,570 unique articles, 177 articles were included. There were 28 commentaries or letters, 1 mixed method, 17 qualitative and 131 quantitative studies. Of the included studies, only 101 involved an educational intervention. Out of the 178 articles, 69 utilized a simulation model for training or assessment. The simulation models included task trainers using inanimate and animate models, and screen-based virtual simulations (e.g., using a scope to navigate through the virtual environment). Regarding assessment, there was a variety of metrics used, including global rating scales, checklists, automated measures (e.g., instrument motion, eye tracking), time, and error rating scales.

Conclusion: The strategies described in this scoping review, including but not limited to use of simulation, combined with didactic teaching and deliberate feedback provide great promise for improving endoscopic training. However, the precise structure and assessment of these interventions require further exploration.

134 Evaluation of the effectiveness of Menti interactive platform on pediatric resident engagement and learning outcomes: A mixed-methods study

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Background: Innovative teaching tools play a critical role in enhancing engagement and learning outcomes in medical education. This study evaluates the effectiveness of the Menti interactive platform on pediatric residents' attention, focus, and perceived learning improvement during postgraduate medical education sessions.

Methods: A mixed-methods approach was employed, involving 10 pediatric residents (PGY 1-3). Of these, 7 had participated in traditional training sessions prior to Menti's introduction, while all 10 participated after the implementation of Menti-supported sessions. Quantitative data were collected using structured surveys across 15 sessions to measure engagement, learning focus, and attention. Qualitative feedback was obtained through open-ended questions to explore residents' subjective experiences. Each session incorporated pre-prepared interactive slides with multiple-choice questions,

Results: The introduction of Menti significantly improved engagement and learning metrics. Active participation increased from 40% pre-Menti to 100% post-Menti. Similarly, perceived learning rose from 25% to 100%, and attention span scores improved from 25 to 100. Quantitative findings indicated that 90% of residents reported a positive educational impact from Menti, with 80% experiencing enhanced knowledge acquisition. Residents noted that Menti simplified complex topics, improved accessibility, and created a dynamic learning environment that supported knowledge retention. In terms of feedback, 70% of participants found Menti's feedback process productive, while 30% rated it less effective. At the end of each session, residents received performance summaries, including quiz scores and visualized takeaways, highlighting areas for improvement. Overall, 90% expressed higher satisfaction with Menti-supported sessions compared to traditional methods. Qualitative feedback emphasized the platform's interactive features, such as Q&A, which boosted engagement and helped residents internalize key concepts effectively.

Conclusion: Menti significantly enhances pediatric medical education by fostering active participation, improving focus, and enriching learning experiences. Its interactive features and feedback mechanisms make it a valuable tool for optimizing educational outcomes in residency programs.

135 Upskilling residents in Pediatric Diabetes management

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Background: Management of Pediatric Diabetes is a high-risk moment in healthcare where it is crucial to be proactive, knowledgeable, and experienced. A coalition led by pediatricians at CHEO and Queen's with expertise in endocrinology partnered with educationalists at Queen's to build a realistic, responsive, self-directed simulation case study series for trainees that explores the high-risk period of a new pediatric diabetes diagnosis.

Methods: The participating learners would interact with the case and determine insulin dosage for the hypothetical patient "JR". Learners would receive personalized, immediate feedback from the research team. Their learning experiences were evaluated through surveys, pre-/post-/3-month-post knowledge tests. Repeated measures ANOVA was performed across the knowledge test results and compared to a control sample of current attending pediatricians to determine whether the learning program successfully upskilled trainees in a safe, but captivating way.

Results: 19 trainees completed the training program so far. They have universally praised the experience. Analysis of their knowledge tests revealed a statistically significant (99% confidence, p-value <0.0001, large effect size) increase in their knowledge test results from pre- to post-confirmed that their learning gains were enduring at the 3-month post program interval compared to pre. Compared with a control group of practicing pediatricians, trainees' scores were statistically higher (99% confidence, p-value <0.0001, large effect size).

Discussion: Our paradigm of self-directed case studies coupled with succinct lessons and immediate tailored feedback provided learning that enabled learners achieving an average of 5/12 on the knowledge test to double their scores when tested 3-months post intervention. We will share our exact design, approaches, and humbly suggest that our peers consider interventions like this one as they train the next generation of learners who will provide healthcare in Canada and beyond.

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