Abstract Booklet

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Translational Healthcare Simulation in Rural Saskatchewan: Interim report on a pilot project developed by the College of Medicine and Saskatchewan Health Authority

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Background: Translational simulation in healthcare focuses on achieving specific healthcare outcomes through education and training, rather than just enhancing system performance by improving individual knowledge or skills. We sought to evaluate this rural simulation pilot project in order to determine impacts on rural healthcare delivery.

Methods: This pilot was launched in 2024 in 2 regional centres in Saskatchewan. Project leads include 2 qualified physician leads as well as their nurse educator counterparts. Using Kirkpatrick's hierarchy for health professional education evaluation, data was collected from several sources to capture outcomes ranging from participants' impressions of the simulations (levels 1 and 2) to healthcare system level impacts through reports of process changes, and development of protocols (levels 4 and 5).

Results: Healthcare providers participated in 12 distinct simulation events. Surveys regarding the quality of feedback, the organization of sessions, and overall impressions indicated high levels of satisfaction (89% of respondents "Agree" or "Strongly Agree", N=10). Qualitative analysis revealed a desire for more sessions, new topics and ways to improve sessions. Program leads also rated the program favorably. The program has resulted in systems-level change in the clinical environments, including improved communication, identification of latent safety threats, and new protocols (i.e. massive transfusion protocol, difficult airway).

Conclusion: This pilot simulation initiative has already shown positive results, with high participant satisfaction, systems-level changes, and the implementation of new care protocols. The program's success demonstrates the potential of translational simulation to enhance patient outcomes in rural settings.

Abstract ID: 5

Leveraging Generative AI for Case-Based Learning (CBL) Development in Physician Assistant Education

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Purpose: Case-based learning (CBL) is a cornerstone of medical education, fostering clinical reasoning and integration of foundational and clinical sciences. Developing high-quality CBL cases for a new program curriculum is labour-intensive. Given the absence of existing Physician Assistant (PA)-specific CBL cases, we explored the potential of Generative AI (GenAI) to assist in case development. We evaluated the feasibility and effectiveness of GenAI in generating CBL cases for a new PA curriculum and assessed its potential for improving efficiency in medical education content development.

Methods: Three commonly used GenAI platforms were tested for CBL case generation. Pre-existing undergraduate medical CBL cases were used as templates to guide AI-generated content. Cases were compared for accuracy, relevance, and adaptability using an expert review process. The quality of AI-generated tutor guides was also assessed.

Results: GenAI successfully generated structured CBL cases, but faculty oversight was required to correct inaccuracies, refine learning objectives, and ensure integration of foundational and clinical sciences. AI-generated cases demonstrated efficiency in content production but lacked nuanced clinical reasoning and required iterative refinement. Tutor guides varied in quality, necessitating manual standardization.

Conclusion: GenAI presents a novel and time-efficient approach to CBL case development, reducing faculty workload while maintaining pedagogical integrity. However, human oversight remains critical to ensure accuracy, relevance, and alignment with curriculum goals. Future research should explore AI-driven adaptive learning models that respond dynamically to student decisions, enhancing personalized medical education.

Abstract ID: 6

The Misunderstood Anesthesiologist: A Prospective Cohort Study Comparing the Effectiveness of Educational Media in Preoperative Assessment Clinics

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Purpose: Preoperative Assessment Clinics (PACs) play a vital role in the anesthetic education of patients, increasing patient satisfaction, facilitating discussion, and easing patients' cognitive burden. However, anesthetic knowledge retention is often poor, especially regarding patients' 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 survey up to 2 weeks post-surgery. The control group received standard verbal education; intervention groups received verbal education with either written, audiovisual, or website-based education. Surveys tested understanding of anesthesiologists' roles pre-PAC visit, post-PAC, and up to 2 weeks post-surgery. 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.

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; however, both post-PAC and post-surgery total scores were higher than pre-PAC.

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

Abstract ID: 7

Assessing the Impact of HIV Continuing Medical Education on Primary Care Clinical Practices in Saskatchewan

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Purpose: Saskatchewan has the highest incidence of HIV diagnoses in Canada. HIV care has evolved and could be well-managed by Primary Care Providers (PCPs). HIV Continuing Medical Education (HIV CME) programming was created in Saskatchewan to empower PCPs to manage HIV and prescribe antiretroviral therapy (ART).

Methods: We assessed how HIV CME impacted PCPs' clinical practices in Saskatchewan and their motivations and experiences. In Phase I, 5 HIV CME educator interviews were thematically analyzed to develop interview questions for Phase II. In Phase II, 10 HIV CME alumni were interviewed to understand motivations, outcomes, facilitators, barriers, and future education needs.

Results: Motivations included improving access to care and expanding scope of practice. Learner-reported outcomes included increased confidence in providing primary care, prescribing ART, and improved access to care for people living with HIV (PLWH). Facilitators included virtual delivery, preceptorship and mentorship. Barriers to changing clinical practice included a need for additional HIV CME, and scarcity of clinical resources. Ongoing education, quick reference materials, and HIV clinician networking opportunities were suggestions for future CME programming.

Conclusion: The PCPs reported increased confidence and improved access when providing primary care to PLWH and prescribing ART in the context of external clinical barriers to providing care.

Abstract ID: 8

Curriculum Innovation for Artificial Intelligence in Health Professions Education: Fostering Interprofessional Collaboration

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Purpose: With the use of artificial intelligence (AI) becoming more prevalent in healthcare, it is important that learners develop knowledge and skills to safely and effectively use these tools. The purpose of this project was to determine how AI is currently incorporated in undergraduate medicine, pharmacy, and nursing programs to inform future curricular development.

Methods/Approach: A survey was developed regarding the integration of AI into medicine, pharmacy, and nursing programs. The survey was informed by Kern's six-step approach to curriculum development. Survey invitations were sent to a sample of undergraduate deans or equivalent in Canada and the United States. Responses were analyzed using descriptive statistics for quantitative data and thematic analysis for qualitative data.

Results/Impact: Among programs which have incorporated teaching on AI, the median number of hours dedicated to AI was 4 hours (interquartile range: 3-4). The most frequent topics were applications of AI in clinical practice (14/22 responses), ethical implications of AI (11/22 responses), legal considerations (8/22 responses), and factors that affect AI accuracy (7/22 responses). The top facilitators for integrating AI into the curriculum were faculty interest in AI (19/22 responses), student interest (14/22 responses), and increasing use of AI in clinical settings (14/22 responses). The top barriers were lack of hours in the curriculum (14/22 responses), advancements in AI occurring too quickly (12/22 responses), and information overload (14/22 responses).

Conclusion: Findings from this study may inform curriculum development strategies to incorporate AI into the curriculum of medicine, pharmacy, and nursing undergraduate programs.

Abstract ID: 10

Creating a Medical Arts & Humanities Elective

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Purpose: Medical Arts & Humanities was previously a 2-year preclerkship course, but is now limited to Year 1. In our desire to continue to encourage humanism in our curriculum, we created a two-week clerkship elective.

Methods/Approach: The two-week clerkship elective in Medical Arts & Humanities began in Fall 2024. The objectives are that through exploring the medical/health humanities, learners will:

1. Develop insights into the body and lived experiences of illness/disease and health care.

2. Develop empathy and compassion for patients, oneself, and others.

3. Advocate for compassionate health care settings and environments.

4. Envision and express a humanistic future for health care.

A Canvas course was created, with two discussion boards. Students attend an initial meeting to discuss their goals for their arts project and a final show-and-share where they present and reflect on the results of their work.

Results/Impact: 18 students will have completed the elective by the end of June 2025. Student projects have been creatively diverse and inspiring. When multiple students take the elective at the same time, there is a sense of belonging and community as they share their art and reflections together. Students also receive EPAs, as the Arts & Humanities learning ties in to their clinical practice and studies. Many students choose to time their elective towards the end of 4th year, or for when they need time away from clinical work to regroup or refresh themselves, and during which the A&H experience allows them the structure and freedom to do so.

Conclusion: The A&H elective has had a positive impact on clerks, who can take time to more deeply explore their interest in health humanities, while improving their own wellbeing and understanding of the medical experience.

Abstract ID: 11

Shifting into High Gear: Leveraging Generative Artificial Intelligence to Accelerate Learning in Pathology Residency Education

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Purpose: Generative artificial intelligence (AI) offers new opportunities to enhance medical education by rapidly developing customized, interactive learning materials. In the Diagnostic and Clinical Pathology residency program, we explored the use of generative AI to convert high-yield study resources into spaced repetition flashcards, aiming to improve knowledge integration, recall, and transfer.

Approach: We selected three commonly used resource types in pathology training: 1) standardized reporting protocols (e.g., CAP cancer protocols), 2) high-yield study guides (e.g., Kurt's Notes), and 3) traditional didactic references. Generative AI models (e.g., ChatGPT) were used to create Anki flashcards from each resource. The AI-generated questions were reviewed for accuracy, relevance, and alignment with pathology training objectives. We also explored the potential of AI to generate or retrieve visual content (e.g., histopathological images) for integration.

Results/Impact: AI-generated flashcards were well-aligned with resident learning needs, demonstrating strong accuracy and relevance. This method enabled rapid, low-effort creation of customized learning tools that support the CanMEDS Medical Expert role. However, AI was less effective in generating high-quality, contextually appropriate images, indicating limitations in visual data synthesis for pathology.

Conclusion: Generative AI can be a powerful tool in postgraduate medical education by transforming trusted study materials into adaptive, personalized resources. While promising for text-based learning, further development is needed to improve AI-generated visual content. This approach has the potential to scale across residency programs and medical specialties.

Abstract ID: 12

Artificial Intelligence in Competency-Based Medical Education: The Future of Canadian Healthcare Training

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Purpose: Artificial Intelligence (AI) is reshaping patient-centered healthcare in Canada and globally. As the next generation of healthcare professionals progresses through medical education, it is essential to equip them with digital literacy and ability to integrate AI into clinical practice effectively. In Canada, medical education is guided by the CanMEDS framework, which has recently transitioned to a competency-based medical education (CBME) model. However, much of today's medical education remains outdated, lacking the necessary training to keep pace with the rapid advancements in healthcare practices.

Approach: A comprehensive literature review of the CanMEDS framework was conducted to identify opportunities for incorporating AI-focused competencies. Given CBME's emphasis on progressive skill development and measurable outcomes, AI-related competencies should be embedded into existing training milestones. A constructivist approach—integrating active learning, case-based scenarios, and real-world applications—can help prepare learners for the complexities of AI in clinical practice.

Results/Impact: Our review suggests the optimal strategy for integrating AI into the CanMEDS framework focuses on the core stage of resident training and role of the Medical Expert. We recommend enhancing existing competencies to incorporate AI-related skills rather than introducing a separate role dedicated to digital literacy.

Conclusion: By leveraging the flexibility of the CanMEDS framework, we aim to establish AI-specific competencies that are measurable, progressive, and conducive to longitudinal learning and continuous feedback. This integration will prepare the next generation of healthcare providers to use AI safely and effectively while maintaining a patient-centered focus.

Abstract ID: 13

Coaching Skills for Better Learning: Helping Faculty Learn to Take a Coaching Approach to Feedback

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Purpose: With the advent of Competency Based Medical Education, coaching skills have been in demand. This course, Coaching Skills for Better Learning, was designed to help participants become moderately proficient at feedback using a coaching approach.

Approach: Using Vygotsky's Zone of Proximal Development as our framework and scaffolding as the practical approach, we designed a course to help participants attain some proficiency in engaging with learners in a feedback session using coaching techniques. Our objectives spanned the three main domains of Bloom's Taxonomy: affective, cognitive, and psychomotor. We introduced knowledge, skills, and attitudes to build on prior learning to gradually reconfigure mental models and habits of feedback and debriefing.

Impact: Facilitators met participants for the first time in January via Zoom. We formed three small groups each meeting at different times to accommodate busy schedules. These monthly synchronous sessions were two-hours. Between sessions there were online learning opportunities needing about an hour of additional work such as readings, 1-on-1 meetings with the facilitators, and group discussion forums. From an initial cohort of 19, there are 14 who are about to complete the program. They expressed in their groups and in discussion forums that they are learning and enjoying the course. The two facilitators have seen progress in meeting the objectives also indicated by the post small group session survey evaluations.

Conclusion: A coaching approach has the potential to improve feedback conversations to better help learners. Our course is a feasible, effective, and engaging way to learn how to apply coaching skills in feedback and debriefing situations. We will offer this course again and gather outcome measures.

Abstract ID: 16

Scheduling call shifts for family medicine residents in Saskatchewan

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Purpose: In Saskatchewan, medical clinics are required to provide continuous call coverage; Family medicine residents (FMRs) participate in these services. The nature of the call experience and the scheduling process are variable. This study aims to assess the current nature and distribution of call shifts, and impact on resident wellness.

Methods/Approach: We conducted a survey of current FMRs in Saskatchewan (urban sites Saskatoon and Regina, and 6 rural/remote sites) in March 2024. Actual call schedule data for two academic years (2021-2023) was obtained for the urban sites.

Results/Impact: Fifty-two FMRs completed the survey (52%). Rural/remote residents (n=26) were the most satisfied with the learning experience; Regina residents (n=9) were markedly more dissatisfied. Residents in Saskatoon (n=17) were more positive about the general experience (e.g., reported less stress/fatigue). Many Regina residents reported attending in person nearly every call shift, while Saskatoon residents rarely attended in person. Call schedules were found to be unevenly distributed among residents; some worked an average of one shift every two weeks, and others more than double that. There are mixed opinions regarding the benefits of call stacking. The most preferred call schedule notice period was 2-3 months.

Conclusion: While rural/remote sites are more satisfied with the learning opportunities, they and Regina residents have more negative feelings toward call than those in Saskatoon, although response bias may be present. More in-person attendance during call likely accounts for the Regina residents' dissatisfaction compared to Saskatoon. There is an uneven distribution of call shifts among residents over total program length, suggesting that procedures should be revised.

Abstract ID: 17

Performance of Medical Students on Point-of-Care Ultrasound OSCE Stations at the University of Saskatchewan

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Purpose: Point-of-care ultrasound (POCUS) is a valuable clinical skill that improves clinical care but requires substantial training and curricular resources. The extent to which medical students should be able to perform POCUS prior to entering residency has not been established. Validated assessment tools provide empirical evidence regarding trainee performance while also informing program-level evaluation. We developed and then deployed POCUS stations for use in objective structured clinical examinations (OSCEs) to assess skill acquisition and durability.

Methods: Two POCUS applications (detection of pleural effusion and abdominal free fluid) were integrated into the Clinical Skills course OSCEs at the University of Saskatchewan's medical school (spring, 2024). Borderline pass was described as a trainee who could complete the task with only occasional prompting. Analysis includes student performance as well as overall OSCE quality metrics.

Results: First year medical students (n=105) performed POCUS for the detection of pleural effusion with a station pass rate of 70.86%. Second year students (n=102) performed POCUS for detection of abdominal free fluid and demonstrated a pass rate of 77.45%. Analysis of each POCUS station revealed high internal consistency, good correlation across checklists and global rating, good inter-grade determination, and low between-group variance.

Conclusion: The majority of students were able to demonstrate substantial and durable POCUS skills. Students' performance on the POCUS stations correlated with their overall OSCE performance. Curricular programming including lectures and supervised scanning sessions appear adequate for current performance expectations.

Abstract ID: 18

E-Mail Nudges, Faculty Development Workshops and Template changes…what impacts the quality of supervisor narrative comments in Competency Based Medical Education?

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Objective: Supervisor narrative comments, as part of workplace-based assessments, are critical for trainee development and progress decisions, however the quality of these comments is often low. Low quality comments threaten the fidelity of implementation of CBME. We determined the effectiveness of different faculty development interventions on narrative comment quality.

Methods: Using the QuAL score as a metric for the quality of supervisor narrative comments, we measured the impact of three different faculty development interventions (e-mail nudges, workshops and template change) aimed to improve performance.

Results/Impact: Using a previously developed natural language processing model, we scored all supervisor narrative comments from faculty in our Royal College Emergency Medicine training program from July 2018 to June 2024. Our overall mean QuAL score rose from 3.3/5 to 4.5/5 during the study period. The majority of faculty (53/61) who received either an email nudge or a faculty development workshop with an individual report card had an improvement in QuAL scores after. The template change from one text box to 3 text boxes with prompts showed an improvement in the overall QuAL score of 3.76/5 to 4.4/5; the rate of having a 'suggestion for improvement' within the comment went from 44.2% to 74.4%.

Conclusion: Through a multi-faceted faculty development approach, we have demonstrated a significant improvement in supervisor narrative comment quality. No one intervention was superior to another and we were able to reach the majority faculty member by using three different methods. Other programs can consider our approach when trying to improve the quality of supervisor narrative comments.

Abstract ID: 20

Pre-OSCE Calm: Mindful Breathing in the Assessment Environment

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Purpose: The Assessment environment is increasingly stressful for students, staff and faculty. Our educational QI project aimed to reduce stress and encourage an atmosphere of growth and positivity before and after the OSCE.

Methods/Approach: We introduced a 2 minute mindful breathing exercise with students before and after 3 preclerkship OSCEs. We randomly selected student groups for the pre-OSCE intervention; all groups participated in the post-OSCE breathing. Students completed a stress scale (1-10) pre- and post-the OSCE prebrief. An optional survey was sent to students later to provide qualitative feedback. Facilitators compared reflections on the post-OSCE breathing exercise debrief atmosphere.

Results/Impact: Following the mindful breathing exercise, stress scores in the intervention group decreased 0.59 points from an average 6.47 (pre) to 5.88 (post) (59 students); compared to a 0.17 decrease in the non-intervention group from 5.81 (pre) to 5.64 (post), (54 students). Survey theme comments included: increased calm and focus before the exam, reduced anxiety, and possible facilitator difference in intervention impact. The authors noted a difference in the overall energy and mood of the post-OSCE debrief with a more positive, relaxed and calmer approach to student feedback.

Conclusion: Students who participated in a brief breathing exercise were able to reduce their stress levels and feel calmer and focused. This suggests that a simple mindfulness technique can encourage a calm and supportive environment around the OSCE. As incorporating this approach could improve the wellbeing of our students, faculty and staff, we hope to explore other small but potentially impactful ways to build mindfulness into the daily life of our UGME campus.

Abstract ID: 21

Evaluation of Integrating Master of Physical Therapy Students within West Winds Primary Health Centre

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Purpose: Physiotherapists (PTs) are often underutilized on primary care teams, despite extensive training and expertise in managing musculoskeletal conditions, rehabilitation, and promoting physical well-being. Inclusion of PTs in team-based primary care presents a significant opportunity to address primary care access gaps. The purpose of this project was to evaluate the implementation of Master of Physical Therapy (MPT) students within West Winds Primary Health Centre.

Methods: Seven semi-structured interviews were conducted with MPT students (1), PT clinical instructors (2), family medicine residents (1), and family physician preceptors (3). Data collection is ongoing with initial thematic analysis of transcripts reported here.

Results/Impact: Preliminary findings include benefits, challenges, and recommendations for improvement across the following preliminary themes: Trust and Relationship Building, Interdisciplinary Collaboration and Education, and Increased Access and Health Equity. Participants reported improved patient education skills, interdisciplinary education and learning opportunities, and enhanced comprehensive patient care. Implementing “warm handovers” where physicians/ residents referred patients directly to MPT students was well-received across participants. A lack of clinical space for MPT students was indicated as a barrier to seeing more patients. An increase in quality of care and healthcare equity for patients was demonstrated, as having practitioners in one space facilitated access to services, both geographically and financially.

Conclusion: Integrating MPT students into a primary care setting provides value for students, residents and other care providers on the team, and importantly to patients who otherwise may not have access to physiotherapy care.

Abstract ID: 22

Developing a curriculum to educate healthcare providers about neurorehabilitation for people with spinal cord injury

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Purpose: To develop an accessible, evidence-based curriculum for healthcare providers on activity-based therapy (ABT) for people with spinal cord injury (pwSCI).

Methods/Approach: Using Kern's 6-Step approach for curriculum development, we are creating a continuing education course to teach ABT skills to healthcare providers: 1) Literature reviewed. 2) Survey conducted using purposeful sampling to explore clinicians' preferences on ABT education through the ABT Community of Practice (CoP). 3) Curriculum goals and learning objectives identified by the CoP's education working group. 4) Three online modules and in-person content in development. 5) Implementation at two sites in Canada planned. 6) Application of Kirkpatrick's model to pilot courses to plan improvement.

Results/Impact: Step 1: The literature review showed that pwSCI view ABT as essential for lifelong rehabilitation but face numerous barriers and facilitators to participation. Step 2: The survey comprised 12 respondents who preferred online modules (n=3), in-person learning (n=7), hands-on learning (n=8), and a blocked learning style (n=8) with access to diverse educational sources (i.e., journal articles, podcasts, etc.). Step 3: First module learning objectives:

Define ABT and describe the underlying principles.
Understand Canadian applications of ABT.
Describe how ABT may contribute to neurorecovery, increased fitness and decreased risk of secondary complications after SCI.
Describe the benefits of ABT.
Understand who can participate in ABT.

Conclusion: In response to clinicians' desire for evidence-based education and training in ABT, we are creating digital modules and an in-person ABT training course for clinicians across Canada. This course will facilitate ABT implementation and increase access for pwSCI.

Abstract ID: 23

The impacts of a night float call system within an orthopedic residency program: a prospective analysis on resident wellness, satisfaction, and education.

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Purpose: Our orthopedic program has historically utilized a 24-hour call system to cover the trauma service. As of July 2023, our program transitioned from traditional 24-hour call to a night float system. The purpose of this study was to analyze the impacts of a night float on resident wellness, satisfaction, and education.

Methods: This prospective study began data collection in May 2023. Orthopedic residents completed surveys at the end of every four week rotation. These surveys assessed health status (SF-36 scores), educational outcomes, and resident satisfaction. We compared the data of three different cohorts: traditional 24-hour call residents, the night float resident, and non-night float residents working within a night float system. Surveys were sent out every four weeks over 16 educational blocks until July 2024.

Results: A total of 92 submissions were collected across 16 academic blocks. Three study groups included orthopedic rotation resident (N=63), night float (N=11), and traditional 24-hour call resident (N=18). Across the three cohorts there were no significant differences in health-related outcomes which included individual SF-36 scores as well as physical and mental component scores (p-values >0.05). Orthopedic rotation residents strongly agreed (78.7%) and agreed (13.1%) that their educational experience was improved by having a night float system in place. Junior residents took approximately 50 less post call days over the academic year. Furthermore, junior residents are doing approximately 50 less 24-hour shifts over a full academic year with the new call system.

Conclusion: A night float system is a reasonable alternative to the traditional 24-hour call system for an orthopedic program.

Abstract ID: 25

Gamifying Virtual CME Learning: Enhancing Engagement Through Educational Games

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Purpose: The CME webinar series has provided accessible, low-cost virtual learning opportunities to healthcare professionals for several years. However, despite robust uptake, the webinar learning experience tends to be somewhat passive. To increase engagement, we designed and implemented a pilot integration of educational games with a view to extend and consolidate the learning initiated by the webinar lecture. The purpose of this study was to investigate the extent to which participating healthcare professionals engage in this gamified environment.

Methods: This exploratory case study design initially analyzed webinar registration and attendance records, and engagement and participation data from the Interacty gamification online platform.

Results: Initial engagement data shows strong participation and engagement across the first 11 educational games with 64% of attendees of the webinars participating in the games on average (SD = 28%; M = 24 users, SD = 13 users) with 34 views on average (SD = 19) for an average time of 63 seconds of engagement (SD = 30 seconds).

Conclusion: Preliminary findings suggest that gamification shows powerful potential for extending webinar-based learning. The games are capturing learners' attention. Further study is needed to determine whether gamification enhances learning or long-term engagement in continuing medical education, or if it is merely an interesting experience.

Abstract ID: 26

Power to the Pod: The Potential for Medical Imaging Journal Podcasts to Boost Article Metrics and Knowledge Dissemination

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Purpose: Podcasts have become popular in medical education for direct knowledge translation to listeners. In doing so, they may also boost journal article visibility. The study goal is to determine if articles featured on two radiology journal podcasts (the American Journal of Roentgenology (AJR) and American Journal of Neuroradiology (AJNR)) have increased article metrics, implying increased impact of the articles through podcasts.

Methods/Approach: A retrospective analysis of AJR and AJNR articles from January 2021 to December 2022 was performed. Article types never featured on podcasts were excluded. Metrics including downloads (AJR only), citations, Altimetric Attention Score (AAS) and its components were collected. Medians were compared using Mann-Whitney U-tests.

Results/Impact: For AJR (n=374), the podcast (PC) group (n=106) had significantly higher median Google Scholar citations (7.0 vs. 6.0, p=0.01), Dimensions citations (7.0 vs. 5.0, p=0.0004), downloads (2,082.5 vs. 1,084, p<0.001), and AAS (11.0 vs. 6.0, p<0.001) than non-podcast (NPC) articles. Subgroup analyses showed significantly higher median metrics for the PC group in most comparisons with greater than 50 articles. For AJNR (n=555), PC articles (n=102) had significantly higher median Google Scholar citations (8.0 vs. 7.0, p=0.046) and AAS (7.0 vs. 6.0, p=0.02). Non-journal club AJNR articles showed higher median citations in the PC group, as opposed to journal club articles demonstrating no significant differences between PC and NPC groups.

Conclusion: Articles featured on two separate medical imaging journal podcasts had greater traditional and non-traditional metrics. This implies that podcasts may enhance medical education both by direct knowledge sharing to listeners and boosting article impact.

Abstract ID: 27

Exploring the Influence of Near-Peer Teaching on Fourth-Year Medical Students' Readiness for the Canadian Residency Match: A Mixed-Methods Study Applying Self-Determination Theory

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Purpose: The Canadian Resident Matching Service (CaRMS) process is a significant source of stress for medical students. This study evaluates a near-peer teaching (NPT) program's impact on fourth-year students' readiness for CaRMS using Self-Determination Theory (SDT), which emphasizes autonomy, competence, and relatedness as critical to motivation and well-being.

Methods/Approach: A mixed-methods design was used to assess three NPT lectures (Electives, Applications, Interviews) delivered by previous-year graduates throughout the academic year. Fifty-five students completed all three post-lecture surveys using a 7-point Likert (scale 1 = strongly disagree, 7 = strongly agree), adapted from validated SDT-based tools. Additionally, 25 students participated in semi-structured interviews. Quantitative and qualitative data were analyzed descriptively and thematically, respectively.

Results/Impact: Survey responses showed high agreement across SDT domains. Students felt increasingly competent, with "capable of succeeding in CaRMS" rising from 5.71 to 6.29 across sessions. Autonomy-supportive items, such as "encouraged to ask questions," received the highest overall ratings (mean: 6.77). Relatedness remained consistently strong (means >6.0). Interviews revealed five themes: stress and anxiety; increased competence and preparedness; greater control and decision-making; enhanced peer connection; practical, timely advice. Students valued the honest, experience-based insights provided by near-peer lecturers and reported greater clarity and reduced uncertainty in applying to CaRMS.

Conclusion: SDT-informed NPT may enhance medical students' confidence, control, and well-being during the CaRMS process and offers a promising educational model in undergraduate medical education.

Abstract ID: 28

Rural Healthcare Practitioners in Saskatchewan: Insights and Strategies for Enhanced Engagement and Effectiveness of CME Webinars

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Purpose: Rural healthcare practitioners face multiple barriers to enhancing their practice including engagement in continuing medical education. The purpose of this evaluation is to assess the reach, needs, barriers and impact of the CME webinar series on rural healthcare practitioners.

Methods: This project examines quantitative data on reach, satisfaction, self-report learning, intention to make changes, and barriers are drawn from registration and attendance reports. Analysis of post-webinar surveys on satisfaction and learning will explore barriers and how the webinars have influenced clinical practice. Ethical exemption has been obtained (BEH 5321).

Results: Preliminary analysis of 2023 -2024 data of 611 webinar registrations shows the interprofessional reach of the webinar series with registrations encompassing family physicians (55%), nurses (19%), dentists (5%), and pharmacists (3.4%). When examining location, 35% of registrants reported addresses (work or living) in Indigenous, Rural, Northern (SK or Canada). Of these, 55% are Family Physicians, 22% are nurses, and 4% are Dentists. Additional findings will be discussed

Conclusion: This evaluation project examines the reach, effectiveness, specifically how well the CME webinar series is working for rural physicians in Saskatchewan and their needs and barriers. This initial project is part of a larger mixed-method study on how webinars could be improved to better meet the needs of rural physicians and make the program more effective to ensure it helps rural physicians continue to grow in their practice and better serve their communities.

Abstract ID: 29

Integrating Community-Identified Health Priorities into Medical Education: A Saskatchewan Case Study

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Purpose: This presentation examines the mechanisms through which the Division of Social Accountability (DSA) integrates community-identified health priorities into medical education with the goal of fostering socially accountable medical education that addresses health inequities, improves patient-centered care, and strengthens community trust in healthcare institutions.

Approach: To align education, research, and service activities with the priority health concerns of local communities, the DSA engaged in consultation with Saskatchewan community members and community-based organizations from 2022-2024. This collaborative process led to the creation of the "Priority Health Concerns of the Saskatchewan Population" guiding document. This resource incorporates community perspectives and identifies the most pressing social and health challenges facing the province's populations. Case studies demonstrating how these issues have informed curricular innovation are highlighted.

Impact: The consultation-driven approach has enhanced the relevance and responsiveness of medical education at USask. It has supported efforts to address health inequities, foster patient-centered care and build community trust in healthcare institutions. Embedding community voices into medical training ensures that future professionals are better equipped to meet the evolving needs of the populations they serve.

Conclusion: This model demonstrates the value of socially accountable medical education that is adaptive to regional health priorities. While challenges exist in integrating community-driven priorities into structured medical curricula, strategies for optimization are proposed. Ultimately, this approach advances health equity and improves healthcare outcomes in Saskatchewan and beyond.

Abstract ID: 30

Integrating Equity, Diversity, and Inclusion in Medical Education: A Social Accountability Approach

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Purpose: A socially accountable curriculum fosters socially accountable physicians who can recognize and address systemic inequities in healthcare. To further USask's commitment to social accountability, the Division of Social Accountability (DSA) has developed a comprehensive curricular review tool, to assist in an inclusive and equitable curriculum development, application, and review process. This initiative aimed to shape a more inclusive and socially responsive medical education framework.

Approach: The Social Accountability and EDI Curriculum Review Tool was disseminated by the DSA to encourage more inclusive and equitable curriculum for undergraduate medical education. The tool is embedded into the curricular review process and circulated among curriculum teams for dissemination.

Impact: The curricular review tool provides a structured approach to embedding considerations of social accountability and EDI into medical education. It ensures that graduates are not only clinically proficient but also capable of recognizing and addressing systemic inequities faced by patients from diverse backgrounds. In the future feedback collected from students and curriculum teams will inform continuous improvement and highlight both strengths and gaps in addressing social accountability in the curriculum.

Conclusion: By integrating this curricular review tool into medical education processes, the CoM is taking meaningful steps toward fostering socially accountable physicians who can deliver equitable and responsive care. This initiative contributes to shaping a more inclusive medical education framework, ensuring future healthcare professionals are prepared to meet the complex needs of diverse patient populations and address health disparities.

Abstract ID: 31

Utilizing the RE-AIM framework to assess knowledge mobilization of new CAN-PCC guidelines via educational activities for HCPs, patients and public

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Purpose: To evaluate the reach, effectiveness, adoption and implementation of a USask CAN-PCC knowledge mobilization project using the RE-AIM Framework.

Methods/approach: With over 4.5 million Canadians affected by Post COVID-19 Condition (PCC), health care providers (HCPs), patients, and families struggle to keep pace with new evidence, and emerging guidelines. In response, a group from the University of Saskatchewan led one of the CAN-PCC knowledge mobilization projects to disseminate new national CAN-PCC guidelines funded by the Public Health Agency of Canada (PHAC).

Based on two learning needs assessments, educational activities were designed: 10 webinars complemented by development of infographics and dissemination via outreach, social media and conference presentations. The webinars were evaluated by a post-event survey, follow-up survey and engagement tracking. The evaluation was reviewed and exempted by the USask Research Ethics Review board (Beh-4371).

Results/impact: Reach: The webinars reached HCPs and patient/public from all 10 provinces in Canada and international with 577 attendances out of 1521 registrations. HCPs attended self-reported serving multiple equity-deserving populations. Effectiveness and Adoption: 88 post-webinar evaluations indicated increased knowledge of CAN-PCC guideline topics, meeting of attendees' expectations, and intention to implement change in practice. Implementation: Follow-up surveys indicate moderate implementation.

Conclusion: Knowledge mobilization of emerging CAN-PCC guidelines educational activities engaged HCPs, patients and public, enhanced knowledge and self-reported patient care practice. Educational barriers to PCC care identified indicate the need for continued education on PCC.

Abstract ID: 33

A Pathway of Excellence in Organ Donation and Transplantation: A novel curricular design project

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Purpose: Solid organ transplantation is a lifesaving treatment for individuals with end-stage organ failure. Improving medical student knowledge and confidence in ODT has the potential to expand opportunities for donation and transplantation.

Methods: Utilizing Kern's six step approach to curricular development, qualitative interviews were performed with 1) donation and transplantation healthcare professionals; 2) organ transplant recipients, live donors and families to identify important teaching topics. Consensus surveys with primary care providers assessed the significance of each topic. Curricular threads were developed to link objectives with specific courses.

Results: Stakeholder interviews identified two core competencies essential for ODT education: 1) medical knowledge; 2) patient-centered communication. Within each category, key sub-themes emerged: knowledge of kidney disease and transplantation, patient processes, post-surgical care, logistical challenges, empathy and compassion, personal connection, clear communication, advocacy, and practical experiences. These were reinforced by primary care surveys highlighting communication, ethics, logistical challenges, and medical overview of donation and transplantation being the most important (Likert score >70/100). Five curricular threads were developed-Science of ODT, Skills of ODT, Communication, Humanistic Aspect of ODT, Showing Empathy-to be embedded within existing courses.

Conclusion: We propose a novel curriculum on ODT that is designed from the needs of key stakeholders; specifically healthcare professionals, patients, families, and donors. This curriculum aims to enhance medical student education, ultimately contributing to improved organ donation rates and transplant opportunities.

Abstract ID: 34

Evaluating the Quality of LLM-Generated Multiple-Choice Questions in Undergraduate Medical Education: A Comparative Study Across Five Large Language Models

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Purpose: To compare the performance of five large language models (LLMs) in generating high-quality multiple-choice questions (MCQs) aligned with the needs of undergraduate medical education (UGME).

Methods: Five state-of-the-art LLMs were prompted to generate MCQs based on learning objectives from the Foundations in Clinical Medicine III course at the University of Saskatchewan. Thirty-five MCQs from each model were evaluated by three medical educators using a standardized rubric adapted from Medical Council of Canada guidelines. The rubric evaluated the stem, correct answers, distractors, overall quality, and technical quality across several categories, each rated on a Likert scale from 1 to 5. A sixth LLM was used to independently evaluate each question using the same rubric, serving as an AI evaluator.

Results: All models showed comparable performance in stem quality, correct answer accuracy, distractor plausibility, and technical quality ($p > 0.05$). Significant differences emerged in overall quality ($p = 0.0084$), with Gemini Advanced outperforming the others (mean 4.77 ± 0.30) and Mixtral Large 2 scoring lowest (mean 4.60 ± 0.61). No significant differences were found in aggregated scores across all criteria ($p = 0.27$). The AI evaluator's ratings closely aligned with human evaluations but trended slightly higher. The rubric showed strong internal consistency (Cronbach's $\alpha = 0.82–0.96$), though human inter-rater reliability was modest (Cohen's $\kappa = 0.12–0.16$).

Conclusion: LLMs demonstrate promising potential in generating high-quality MCQs for medical education. The integration of an LLM as an AI evaluator offers a scalable approach to validation and may help reduce educator workload while maintaining quality standards.

Abstract ID: 36

Acceptability and Implementation of Kinesiology Students in a Family Practice Setting

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Purpose: To integrate exercise counselling into a team based primary care setting by creating a clinical practicum placement for Kinesiology students at West Winds.

Methods: An initial Dean's project completed a literature review and environmental scan, obtained ethics approval for a qualitative feasibility study to explore the acceptability to physicians, residents, patients and kinesiology students. The following year with funding from the Dean of the College of Kinesiology, focus groups were completed. With general agreement across groups, the learning experience was implemented in 2024. Two groups of two kinesiology placements have been completed in 2024 and early 2025. Evaluation of the experience is planned awaiting a sufficient sample to ensure confidentiality/anonymity for the students involved.

Results/Impact: Several presentations were completed by the Kinesiology students to their program and to the Family Medicine residents. Informal feedback has been positive. Patients has been increasingly engaged with exercise counselling with particular impact for elderly patients including in Fragility Assessments and physical exercise counselling. Kin students are actively participating in team activities including sign in rounds, huddles, patient clinical records and presentations in Academic Half Day. Abstract for FMF has recently been accepted.

Conclusion: Exercise is a well established intervention in primary care for many common chronic diseases and mental health disorders. Kinesiology students can be taught alongside family medicine residents in primary care settings in a team based environment. Further evaluation of this experience is required once feasible. Impact on students, team members and patients should be included.

Abstract ID: 37

Medical Learners' Perceptions of Rural Clinical Placements and Temporary Housing: Potential Impact on Rural Career Intentions

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Purpose: This study examines how rural clinical placements and the quality of temporary housing impact medical learners' perceptions of rural medicine and their willingness to practice in rural communities.

Methods: A voluntary electronic survey was distributed to all USASK medical students and residents in January 2025. Participants provided insights into their experiences, satisfaction with rural placements (including housing), and overall perceptions of rural practice. Responses were measured using five-point Likert scales. Statistical analyses explored the relationship between rural placement experiences, temporary housing conditions, and future career intentions.

Results: A total of 149 medical learners completed the survey (103/412 medical students, 46/492 residents). Most respondents (65% of students, 80% of residents) required temporary housing for their rural placements, and the majority were at least somewhat satisfied (77% of students, 71% of residents).

Both medical students and residents overwhelmingly agreed that rural placements positively influenced their perception of rural medicine, regardless of their hometown size. Learners who had completed rural placements were significantly more likely to support mandatory rural rotations compared to those who had not (4.44 ± 0.98 vs. 3.87 ± 1.23 (on 5-point Likert), $p < 0.001$). Additionally, 96% of respondents agreed that the quality of housing impacts their perception of their rural experiences.

Conclusion: These findings underscore the critical role of rural clinical placements in shaping medical learners' attitudes toward rural practice. Providing adequate housing is essential to ensure learners have a positive and enriching rural training experience, which may in turn increase their interest in a rural career.

Abstract ID: 38

Creating Cost-effective, Low-tech Models to Enhance Procedural Skill Competencies among Family Medicine Residents

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Background: Simulation-based education provides medical students and residents with opportunities to develop skills via hands-on learning in a low-stress environment. High-fidelity simulation models can be cost-prohibitive; nevertheless, lower-tech models have also been shown to be effective for improving procedural skills. Faculty members at a Family Medicine residency program developed cost-effective, low-tech simulation models to enhance training opportunities for Family Medicine residents.

Methods: Construction and acquisition costs for simulation models used in the course were calculated; a per-resident cost was established. A low-tech cost-effective simulation models were created by the authors via an in-kind donation of their time and skills along with porcine and bovine tissue and organs provided realistic-feeling simulation models for residents to practice different procedural skills. Trainees completed a survey to evaluate the models' effectiveness, realism, and ease of use.

Results: A total of 677 surveys for 15 different procedures (ie., toenail excision, skin laceration repair, etc) were completed. most clinical procedural skills were highly rated by residents, with a majority receiving a perfect median score of 10/10 and minimal variability (IQR 10–10). The total cost of practice for 7 models was $38.31 CDN per resident.

Conclusions: Low-tech simulation is a cost-effective solution for enhancing procedural skills training amongst Family Medicine residents. Not all programs can afford expensive, high-tech simulation models such as computerized mannequins. With minimal cost and a modest investment of time and skill upfront, programs can create valuable simulation training tools to facilitate hands-on learning for their residents.

Abstract ID: 39

Effectiveness of a new procedural skills curriculum in improving confidence among family medicine residents to perform office-based clinical procedures.

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Background: Office based clinical procedures are an important aspect of family medicine practice. There is variation in procedural skills curricula across Family Medicine training sites in Canada. A new standardize procedural skills curriculum was developed and implemented at the Regina Family Medicine Residency site to improve confidence in performing procedures among residents.

Are important design elements (objectives, information provided, support received, problem solving and feedback) present in simulation sessions and how important are these to residents?

Methods: Residents who attended procedural skills sessions as part of their first year of Family Medicine residency training in Regina, Saskatchewan between 2018 to 2024 completed feedback surveys anonymously. Following these sessions, residents were provided the Simulation Design Scale (SDS) and asked to rate the presence and importance of the five design elements present in simulation sessions of each low-cost simulation model used during the session. Higher scores on the SDS indicate that a design element is present in the simulation.

This study was exempted by the Behavioral Ethics Board of the University of Saskatchewan (REB 17-102).

Results: A total of 305 surveys were completed. Residents found the design elements were consistently present in the simulation sessions, with a median overall SDS score of 90 out of 90 (IQR: 80-90). Residents also rated the design elements as important and of high fidelity. These results were consistent year-to-year.

Conclusions: Residents find that the simulation sessions, important components of the procedural skills curriculum at the Regina Family Medicine residency training site, include important design elements and a high degree of fidelity.

Abstract ID: 40

Enhancing Self-Directed Learning Through H5P Content in the X-ray Module

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Musculoskeletal and X-ray imaging remain core topics in medical education, particularly for pre-clerkship medical students. Effective learning in this area requires students to dedicate time to practice image interpretation and develop personalized strategies for evaluating MSK X-rays. To address these challenges, a blended learning approach—combining interactive self-directed learning (SDL) with traditional didactic instruction—may offer an effective solution. In this context, H5P, an open-source platform —was utilized to develop a set of interactive learning contents for a self-directed X-ray learning module for second-year students.

We developed a blended learning approach to transform a pre-existing, lecture-based X-ray module into self-directed learning alongside traditional lectures. We used the H5P platform to create interactive learning content within the Canvas learning management system. A variety of H5P content types were employed to enhance engagement. Students attended didactic lectures, and then they were required to complete a series of H5P self-directed learning activities related to the respective topic.

This study explores the student experiences of a blended learning approach that integrates H5P SDL X-ray modules with traditional didactic lectures. Students reported that the use of interactive H5P content, including self-paced quiz questions, knowledge checkers, drag-and-drop activities, and multiple hotspot questions with feedback, enhanced their competency in recognizing and developing X-ray images, and facilitated mastery learning.

The integration of H5P interactive tools within the Canvas LMS as part of self-directed learning significantly improved medical students' learning experiences with X-ray learning practice.