

## P124

**Canadian faculty experience of participating in a global health partnership working to build emergency medicine capacity in Ethiopia**

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**Introduction:** Global health partnerships (GHPs) between high income and low income countries are a means of capacity building in education. Literature often focuses on the GHP structure and output, along with retention and experience of local trainees, but neglects the experience of involved faculty. Here, we survey Canadian teaching faculty participating in the Toronto Addis Ababa Academic Collaboration in Emergency Medicine (TAAAC-EM) to describe characteristics of participants and their experience in the program. **Methods:** EM faculty participating in TAAAC-EM teaching trips from 2011-2016 were invited to complete an online survey in February 2017. Teaching faculty travel for one month and undergo an extensive selection process, pre-departure training and post-trip debriefing. Quantitative and qualitative data were collected and analyzed using basic statistics and inductive thematic analyses respectively. **Results:** Overall, 19 (N = 30, 63.3%) faculty completed the survey, of which 13 had prior global health experiences (range 1 to > 12 months). On a scale of 1-7, participants rated their mean overall experience as a 5.9 and preparation as a 5.7. Among respondents, 79% would participate in future TAAAC-EM activities, 79% would engage in future global health endeavours, 95% said the experience improved their satisfaction of practicing clinical medicine and 89% said it improved their enjoyment of teaching medicine. However, while 58% stated they would recommend this experience without hesitation to colleagues, the remaining 42% said they would recommend this experience with caveats. This latter group had a lower rated preparedness (MD = 1.398, p = 0.003) and TAAAC-EM experience (MD = 1.545, p = 0.001). Major themes in qualitative responses included that the participants felt that intrinsic motivation and flexible predispositions were necessary to participate. Intrinsic motivation for global health involvement included appreciation and impact for GH, and personal growth. Regarding flexibility, respondents highlighted the importance of having a flexible demeanor to understand, accommodate and ethically address cultural differences and practicing in another context. **Conclusion:** The type of faculty to recruit for GHPs may require flexible predispositions and intrinsic motivation for GH. These qualities combined with adequate preparation can facilitate overall faculty experiences on global health trips.

**Keywords:** global health, medical education, professional development

## P125

**Faculty development in the age of competency-based medical education: a national, cross-sectional needs assessment for Canadian emergency medicine faculty**

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**Introduction:** In July 2018, Emergency Medicine (EM) transitioned to the Royal College of Physicians and Surgeons of Canada's (RCPSC) Competence by Design (CBD) training framework. In anticipation of CBD implementation, we conducted a nation-wide needs assessment of EM faculty and senior residents to understand

their attitudes towards CBD, workplace-based assessments (WBA) and overall educational needs. **Methods:** A multi-site, cross-sectional digital survey was conducted in winter 2018 with a sample of EM faculty and senior residents across RCPSC EM programs in Canada. Recruitment was via program director nomination. Survey domains included baseline perceptions about CBD, attitudes toward implementation, perceived/prompted and unperceived faculty development needs. Microsoft Excel was used to calculate descriptive statistics. This study was reviewed by the Hamilton Integrated Research Ethics Board. A multi-site, cross-sectional digital survey was conducted in winter 2018 with a sample of EM faculty and senior residents across RCPSC EM programs in Canada. Recruitment was via program director nomination. Survey domains included baseline perceptions about CBD, attitudes toward implementation, perceived/prompted and unperceived faculty development needs. Microsoft Excel was used to calculate descriptive statistics. This study was reviewed by the Hamilton Integrated Research Ethics Board. **Results:** Between February-April 2018, 47 participants (40 faculty, 7 residents) completed the survey (58.8% response rate). Most respondents (89.4%) thought learner feedback should be provided on each shift; 55.3% believed they provided adequate feedback. Time constraints, learner disinterest and fear of assessment repercussions were the top three barriers to providing good feedback. A majority of respondents (78.7%) thought that the ED provided above average opportunities for direct observation and 91.5% were confident of incorporating WBAs into their practice. 44.7% reported that CBD will not impact patient care; 17.0% perceived it may have a negative impact. 55.3% felt that CBD will lead to improved feedback for trainees. The top areas for faculty development were: feedback delivery, completing WBAs, resident promotion decisions, and receiving feedback on teaching. Only 25.5% were interested in learning about CBD, although the average of correct responses on the CBD knowledge test was 44.6%. **Conclusion:** EM is well-situated to transition to CBD given clinicians' positive attitudes towards feedback, direct observation, WBAs, and opportunities for direct observation. Threats to CBD implementation are concerns about effects on patient care and trainee education, and skepticism regarding effects on feedback quality. Faculty development should concentrate on further developing clinical teaching and supervision skills, focusing on feedback and WBAs.

**Keywords:** change management, Competence by Design, faculty development

## P126

**Entrepreneurship in healthcare and health education: A scoping review**

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**Introduction:** Today's emergency department sees healthcare system pressures manifest through longer wait times, increased costs, and provider burnout. In the face of questionable sustainability, there is a greater role for training future innovators and entrepreneurs in healthcare. However, there is currently little formal education or mentorship in these areas. The aim of this scoping review was to identify the current and ideal educational practices to foster innovative and entrepreneurial mindsets, with specific interest amongst emergency medicine trainees. **Methods:** Using a scoping review methodology, the relationship between healthcare and entrepreneurship was explored. OVID, PubMed and Google Scholar were searched using

the keywords “entrepreneurship”, “health education” and “health personnel”, on March 8th, 2018. Results were screened by title, abstract and full text by a team of three calibrated researchers, based upon pre-defined exclusion and inclusion criteria. The final list of papers was reviewed using an extraction tool to identify demographics, details of the paper, and its attitudes and perceptions towards entrepreneurship and innovation. **Results:** After screening, 59 papers were identified for qualitative analysis. These papers ranged from 1970–2018, mainly from the USA ( $n = 36$ ). Most papers were commentaries/opinions ( $n = 35$ ); 11 papers described specific innovations. Entrepreneurship was viewed positively in 45 papers, negatively in 2 papers, and mixed in 12 papers. Common specialties discussed were surgery ( $n = 9$ ), internal medicine ( $n = 3$ ), and not specified ( $n = 44$ ). Emergency medicine was described in one paper. Major themes were: entrepreneurial environment ( $n = 29$ ), funding and capital ( $n = 12$ ), idea generation ( $n = 9$ ), and teaching entrepreneurship ( $n = 6$ ). Of the 11 innovation papers, the discussion was focused on educational ( $n = 6$ ) or system ( $n = 5$ ) innovations. These innovations related to surgery ( $n = 1$ ), public health ( $n = 1$ ) and palliative care ( $n = 1$ ). None of these innovations were specific to emergency medicine. **Conclusion:** This review indicates a small number of programs focused on promoting innovation and entrepreneurship amongst trainees, but no programs specific to the emergency department. There may be benefit for educators in emergency medicine to consider how to foster a greater innovative spirit in our speciality, so our next generation of physicians can help tackle problems affecting patient care.

**Keywords:** entrepreneurship, health education, innovation

#### P127

##### Health information technology and the Ontario emergency department return visit quality program - A population level continuous quality improvement program

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**Introduction:** Emergency department (ED) return visits are used for quality monitoring. Health information technology (HIT) has historically supported return visit programs in the same hospital or hospital system. The Emergency Department Return Visit Quality Program (EDRVQP) is a novel population level continuous quality improvement (QI) program connecting EDs across Ontario that leverages HIT. We sought to describe the EDRVQP HIT architecture, experience of participants, enabling program factors and barriers. **Methods:** The Informatics Stack conceptual framework was used to describe the HIT architecture. A literature review of peer-reviewed background literature, and stakeholder organization reports was conducted. Purposive sampling identified key informants. Semi-structured interviews were conducted until saturation. Common themes were identified by inductive qualitative thematic analysis. **Results:** Twenty-three participants from 15 organizations were interviewed. The EDRVQP architecture description is presented across the Informatics Stack. The levels from most comprehensive to most basic are world, organization, perspectives/roles, goals/functions, workflow/behaviour/adoption, information systems, modules, data/information/knowledge/algorithms, and technology. Enabling factors were a high rate of EHR adoption, provincial legislative mandate for data collection and program membership, use of functional and data standards, local variability, phased deployment, and QI and patient safety culture. Two main barriers were increased case turnaround time and privacy legislation.

**Conclusion:** The Informatics Stack framework provides a robust approach to thoroughly describe the HIT architecture of this population health programs. The EDRVQP is a population health program that illustrates the pragmatic use of continuous QI methodology across a population (provincial) level.

**Keywords:** emergency department, information technology, public health informatics

#### P128

##### Describing variability in treatment of THC hyperemesis in the emergency department: a health records review

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**Introduction:** Cannabis Hyperemesis Syndrome (CHS) is a new and poorly understood phenomenon with a subset of patients presenting to emergency departments (ED) for symptomatic control of their refractory nausea and vomiting. Currently, there is a lack of agreement and considerable practice variability on initial treatment modalities for CHS. The objective of this study was to describe the treatment modalities for patients presenting to ED with cannabis-related sequelae.

**Methods:** This was a health records review of patients  $\geq 18$  years presenting to one of two tertiary care EDs (annual census: 150,000) with a discharge diagnosis including cannabis use with one of abdominal pain or nausea/vomiting using ICD-10 codes. Trained research personnel collected data from medical records including demographics, clinical history, results of investigations, and utilization of treatment options within the ED. Descriptive statistics are presented where appropriate. **Results:** From April 2014 to June 2016, 203 unique ED patients had a discharge diagnosis including cannabis use with abdominal pain or nausea/vomiting. Sixty-nine (33.4%) received any treatment during their visit with 28 (40.6%) receiving IV fluids, of which 24 (85.7%) received normal saline. Anti-emetics were used in 21 (30.4%) patients with ondansetron being the first-line agent in 11 (52.4%) patients followed by dimenhydrinate in 6 (28.6%) and haloperidol in 2 (9.5%) cases. Six patients required two doses of anti-emetics, favouring ondansetron in 3 cases followed by haloperidol, dimenhydrinate, and metoclopramide each used once. Thirteen (19%) patients required analgesia, with the first-line preference being non-opioid medications in 11 versus opioids in 2 cases. Seven patients required multiple modes of analgesia, favouring opioid medications in 4 patients. Twenty-eight (40.6%) patients required anxiolytics with lorazepam being used primarily in 16 (57.1%) patients followed by lorazepam/haloperidol in 5 (17.9%) cases. **Conclusion:** This ED-based study demonstrates variability of practice patterns for symptomatic treatment of cannabis related ED presentations. Despite knowledge of haloperidol being useful in patients with suspected CHS, physicians opted for ondansetron as first line anti-emetics. Future research should focus on studying various treatment modalities of patients with suspected CHS in the ED to optimize symptomatic treatment.

**Keywords:** cannabis, nausea, pain

#### P129

##### Safer transitions in the care of the elderly: identification of essential information in transitional care

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**Introduction:** When presenting to the Emergency Department (ED), the care of elderly patients residing in Long Term Care