

pain score was 6.6 in the no-opioid group and 8 in the opioid group. The most common pain categories were abdominal pain (23%), trauma (18.2%) and chest pain (15.3%). Overall, opioids were prescribed to 34% of patients. The most common CTAS score was CTAS 3 (44%), CTAS 1-2 (42%) and CTAS 4-5 (13.9%). Multivariable predictors of opioid-use included the need for admission (adjusted OR 6.57; CI = 6.34-6.79), NRS pain score (aOR 1.24 per unit increase, CI 1.23-1.25), higher numerical CTAS score (aOR 0.89 per unit increase, CI 0.87-0.91), and chief complaints of back (aOR 7.69, CI 7.1-8.1), abdominal (aOR 5.9, CI 5.6-6.2), and flank pain (OR 3.8, CI 3.5-4). Oral opioids were prescribed in 39.8% of back pain presentations and 18.5% received IV opioids. Increasing age was a predictor but sex was not. There were significant institutional differences in opioid prescribing rates, with Hospital B being the least likely to prescribe opioids (aOR 0.82, CI 0.80-0.85) followed by Hospital C (aOR 0.83, CI 0.79-0.86) compared to the reference standard of Hospital A. Hospital D was most likely to prescribe opioids (aOR 1.32, CI 1.27-1.37). **Conclusion:** Predictors of ED opioid use were characterized using multicenter administrative data. Future research should seek to describe the physician- and site-level factors driving regional variation in opioid-based pain treatment.

Keywords: acute pain, emergency department, opioid

MP16

Oral case presentation: evaluation of a novel curriculum and development of a competency-based assessment tool in Emergency Medicine

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Introduction: The oral case presentation is recognized as a core educational and patient care activity but has not been well studied in the emergency setting. The objectives of this study are: 1) to develop a competency-based assessment tool to formally evaluate the emergency medicine oral case presentation (EM-OCP) competency of medical students and 'transition to discipline' residents, and 2) to develop, implement and evaluate a curriculum to enhance oral case presentation (OCP) communication skills in the emergency medicine (EM) setting. **Methods:** Using data from a literature review, a Canadian Association of Emergency Physicians national survey, and local focus groups, the authors designed an OCP framework, blended learning curriculum, and EM-OCP assessment tool. Ninety-six clerkship students were randomly assigned to receive either the control, the standard clerkship curriculum, or intervention, the blended learning curriculum. At the beginning of their emergency medicine rotation, learners completed a pre-test using a standardized patient (SP) case to assess their baseline OCP skills. The intervention group then completed the EM-OCP curriculum. All students completed post-tests with a different SP at the end of the six-week EM rotation. Audio-recordings of pre and post-tests were evaluated using the assessment tool by two blinded evaluators. **Results:** Using the Kruskal-Wallis test, all students demonstrated improvement in EM-OCP skills between their pre-test and post-test, however, those who received the blended learning curriculum showed significantly greater improvement in synthesis of information ($p = 0.044$), management ($p = 0.006$) and overall entrustment decision score ($p = 0.000$). **Conclusion:** Implementation of a novel EM-OCP curriculum resulted in more effective communication and higher entrustment scores. This curriculum could improve OCP performance not only in

emergency medicine settings but also across specialties where medical students and residents must manage critical patients.

Keywords: communication, competency based medical education, curriculum design

MP17

Evaluation of a national competency-based assessment system in emergency medicine: A CanDREAM study

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Introduction: In 2018, Canadian postgraduate specialist Emergency Medicine (EM) programs began implementing a competency-based medical education (CBME) assessment system. To support improvement of this assessment program, we sought to evaluate its short-term educational outcomes nationally and within individual programs.

Methods: Program-level data from the 2018 resident cohort were amalgamated and analyzed. The number of Entrustable Professional Activity (EPA) assessments (overall and for each EPA) and the timing of resident promotion through program stages was compared between programs and to the guidelines provided by the national EM specialty committee. Total EPA observations from each program were correlated with the number of EM and pediatric EM rotations. **Results:** Data from 15 of 17 (88.2%) EM programs containing 9,842 EPA observations from 68 of the 77 (88.3%) Canadian EM specialist residents in the 2018 cohort were analyzed. The average number of EPAs observed per resident in each program varied from 92.5 to 229.6 and correlated strongly with the number of blocks spent on EM and pediatric EM ($r = 0.83$, $p < 0.001$). Relative to the guidelines outlined by the specialty committee, residents were promoted later than expected and with fewer EPA observations than suggested. **Conclusion:** We present a new approach to the amalgamation of national and program-level assessment data. There was demonstrable variation in both EPA-based assessment numbers and promotion timelines between programs and with national guidelines. This evaluation data will inform the revision of local programs and national guidelines and serve as a starting point for further reaching outcome evaluation. This process could be replicated by other national assessment programs.

Keywords: competency based medical education, learning analytics

MP18

Pre-departure and post-elective requirements for global health electives: a survey of Canadian Royal College emergency medicine programs

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Introduction: Participation in Global Health (GH) electives can improve resourcefulness, cultural and ethical insight, and personal development. Risks to trainees, hosts and institutions may be minimized through pre-departure and post-elective training. In 2016 such training was mandatory in only 3 Canadian residency programs, however there is no published data specific to Canadian Emergency Medicine (EM) programs. This study sought to identify current GH elective requirements and related perceived gaps among Royal College EM programs. **Methods:** We conducted two cross-sectional

surveys in 2019 (one each for Royal College EM PDs and residents) via email regarding training requirements for GH electives. Additionally, a survey link was distributed in the CAEP EM resident newsletter. We also contacted university PGME and/or global health offices to understand and collate university-wide requirements and resources. **Results:** Nine PDs responded, with 78% reporting having 1-5 residents participate in GH electives yearly. Many PDs were unsure of the requirements surrounding GH electives; two reported that pre-departure training was required, while none reported requiring post-departure debriefs. Overall, 67% of PDs felt that their residents were moderately prepared for GH electives and 33% felt they were unprepared to some degree. Thirty-three percent believed that improvements should be made to either pre-departure training or both pre- and post-departure training, while 56% were unsure if improvements were needed. Forty-seven out of an estimated 380 residents responded. Thirty-five percent of residents had completed a GH elective during residency. Of residents who participated in a GH elective, only one (6%) reported feeling very prepared; 18 residents (43%) reported there was a need to improve trainings. Residents reported a number of challenges during electives (lack of resources, inadequate supervision, safety issues) and identified priority topics for training. **Conclusion:** Although EM residents are participating in GH electives, the majority of EM residency programs do not require pre- or post-departure training. Some PDs and residents report varying levels of preparedness, and residents acknowledge a variety of challenges during GH electives. This information can be used to inform pre-departure/post-elective GH training or to encourage EM residents to access university-wide training.

Keywords: global health, residency education, residency electives

MP19

Identifying and transmitting the culture of emergency medicine through simulation

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Introduction: Simulation is commonly used in medical education. It offers the opportunity for participants to apply theoretical knowledge and practice non-technical skills. We aimed to examine how simulation may also help to identify emergency medicine culture and serve as a tool to transmit values, beliefs and practices to medical learners. **Methods:** We undertook a focused ethnography of a simulated emergency department exercise delivered to 98 third-year medical students. This ethnography included participant-observation, informal interviews, and document review. Analysis was performed using a recursive method, a simultaneous deductive and inductive approach to data interpretation. We undertook a focused ethnography of a simulated emergency department exercise delivered to 98 third-year medical students. This ethnography included participant-observation, informal interviews, and document review. Analysis was performed using a recursive method, a simultaneous deductive and inductive approach to data interpretation. **Results:** All 20 staff (100%) and 92 of 98 medical students (94%) participated in the study. We identified 7 core values – identifying and treating dangerous pathology, managing uncertainty, patients and families at the center of care, balancing needs and resources at the system level, value of the team approach, education as integral, and emergency medicine as part of self-identity – and 27 related beliefs that characterized emergency medicine culture. We observed that culture was transmitted during the simulation

exercise. **Conclusion:** This study contributes to the characterization of the culture of emergency medicine by identifying core values and beliefs that are foundational to the specialty. Simulation facilitated cultural compression which allowed for ready identification of values, beliefs and practices and also facilitated transmission of culture to learners. This study expands understanding of the culture of emergency medicine and the role of simulation in the process of cultural exchange.

Keywords: culture, ethnography, simulation

MP20

Evaluation of the disruptors during advanced life support in emergency departments

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Introduction: Simulation is used as a teaching technique in the medical curriculum, and especially for advanced life support (ALS). However, simulated ALS can differ greatly from real life ALS. The aim of this exploratory study was to identify the different disruptors associated with real life ALS. **Methods:** We conducted a cross-sectional, anonymous, online survey that included 32 items. It was distributed by email to emergency physicians from five emergency departments in Paris. The aim of this online survey was to identify the elements perceived as disruptors during ALS. Other aspects of the survey explored the perceived differences between simulated ALS and real life ALS. Descriptive statistics of percentage, mean and standard deviation were used to analyse the data. **Results:** Among 100 surveyed physicians, 43 (43%) answers were analysed. 53% were women with a mean age of 32 ± 3 years old. The identified disruptors from real life ALS were task interruptions mainly from non-medical staff (n = 16; 37%), patient's siblings (n = 5; 12%), other specialists (n = 5; 12%) and the phone calls (n = 2; 5%). The situation of ED overcrowding (n = 12; 28%) was also mentioned as a potential disruptor. Overall, physicians reported that some technical and non-technical tasks were harder to perform in real life compared to simulated sessions. **Conclusion:** This exploratory study allowed the identification of disruptors encountered in real life cases of ALS, and may be used for future simulation-based teaching to enhance realism during sessions

Keywords: advance life support, pedagogy, simulation

MP21

Improving the relational aspects of trauma care through translational simulation

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Introduction: Major trauma care is complex, and requires individuals and teams to perform together in time critical, high stakes situations. Scenario based simulation is well established as a strategy for trauma teamwork improvement, but its role in the relational and cultural aspects of trauma care is less well understood. Relational Coordination theory offers a framework through which we aimed to understand the impact of an established trauma simulation program **Methods:** We studied simulation activities using a narrative survey of trauma providers from anaesthesia, emergency medicine, medical imaging, surgery, trauma service, intensive care and pre-hospital providers at Gold Coast University Hospital, in conjunction with data from an ethnography. Data analysis was performed using a recursive approach - a simultaneous deductive approach using the relational coordination