

the survey based on feedback from operations and educational experts. A total of 21 teaching techniques were included in the final survey ranging from didactic teaching sessions to experiential techniques such as residents running the department with supervision. Then, we invited members of the Royal College of Physicians and Surgeons of Canada EM specialty committee, the Canadian Association of Emergency Physicians Education Scholarship Section, and the Canadian EM Simulation Educators Collaborative to participate in our survey. We analysed the results using simple descriptive statistics. **Results:** A total of 21 EM (38% female, 62% male) educators from 11 programs (78% of Royal College Training sites) responded to the survey, representing 7/10 provinces, with a mean years-in-practice of 15.2 years (SD 9.7). All respondents were involved in resident education; 66% had a current formal educational role, such as Program Director. Results showed a universal trend towards teaching flow and management skills later in residency. Participants endorsed 35.93% of teaching strategies for the “Core of discipline” and 39.65% for the “Transition to practice” stages of training. Didactic and observational techniques were occasionally considered acceptable at earlier training stages, whereas experiential teaching techniques were skewed towards the later stages of residency. **Conclusion:** EM educators from across Canada believe that most teaching techniques for flow are better suited for the later stages of residency training, with didactic techniques more suitable earlier on. This work will inform faculty development on managerial/leadership skills teaching in the ED.

Keywords: clinical teaching, competency-based medical education, patient flow

P138

Management of opioid withdrawal: A qualitative examination of current practices and barriers to prescribing buprenorphine in a Canadian emergency department

D. Wiercigroch, BSc, P. Hoyeck, BSc, H. Sheikh, MD, J. Hulme, MDCM, MPH, University of Toronto, Toronto, ON

Introduction: The opioid crisis persists, and in the context of this urgency and new practice guidelines, the practice of buprenorphine (BUP) prescription is expanding across Canadian emergency departments (EDs). The objective of this study was to identify current knowledge, attitudes and behaviours to managing opioid use disorder (OUD) in the ED, including barriers and facilitators to prescribing BUP. **Methods:** Forty ED staff physicians were randomly invited to participate from an urban Toronto ED which recently received continuing medical education in addictions, and whose hospital established an addictions follow-up clinic. Individual semi-structured interviews with the 19 physicians who self-selected to participate were grounded in phenomenology, allowing for in-depth accounts of participants’ lived experience and viewpoints on their role in addressing OUD. Thematic analysis was achieved through multiple readings; themes were coded using Dedoose software by two researchers. Themes were further organized as facilitators, barriers, and proposed solutions. **Results:** Opioid withdrawal management in the ED varied significantly between these practitioners in the same practice group. Facilitators to treating withdrawal and initiating BUP in the ED were rooted in three contributors to physician empowerment: knowledge about OUD and BUP, positive patient and provider experience with substitution therapy in the past, and exposure to physician champions to guide their practice. Systems-level facilitators included timely access to follow-up care and an available order set. Barriers included provider inexperience: missing subtle presentations of withdrawal, lacking feedback on treatment effectiveness, and reported

uncertainty about the protocol from nursing staff. The ED environment also limits time to counsel effectively and discourages taking up a bed both to wait for withdrawal onset and for BUP induction. Other barriers were concerns about precipitating withdrawal, prescribing a chronic medication in acute care, and patient attitudes. **Conclusion:** This is the first study describing barriers and facilitators to addressing OUD and prescribing BUP in the ED. These findings suggest a role for home induction, involvement of allied health professionals in BUP counseling, and heightened continuing medical education. Results will inform departmental efforts across Canada to implement BUP prescribing as standard of care for patients in opioid withdrawal.

Keywords: buprenorphine, opioid, withdrawal

P139

The use of simulation in emergency medicine UGME clerkship education: A quality improvement initiative

D. Karol, BSc, S. Wilson, BSc, C. Elliott, MD, PhD, K. Chen, MD, University of Ottawa, Faculty of Medicine, Ottawa, ON

Introduction: Simulation is becoming widely adopted across medical disciplines and by different medical professionals. For medical students, emergency medicine simulation has been shown to increase knowledge, confidence and satisfaction. At the University of Ottawa Skills and Simulation Centre, third-year medical students participate in simulated scenarios common to Emergency Medicine (EM) as part of their mandatory EM clerkship rotation. This study aims to evaluate simulation as part of the EM clerkship rotation by assessing changes in student confidence following a simulation session. **Methods:** In groups of seven, third year medical students at the University of Ottawa completed simulation sessions of the following: Status Asthmaticus, Status Epilepticus, Urosepsis and Breaking Bad News. Student confidence with each topic was assessed before and after simulation with a written survey. Confidence scores pre- and post-simulation were compared with the Wilcoxon signed rank test. **Results:** Forty-eight third years medical students in their core EM clerkship rotation, between September 2017 and August 2018 participated in this study. Medical student confidence with diagnosis of status asthmaticus (N = 44, p = 0.0449) and status epilepticus (N = 45, p = 0.0011) increased significantly following simulation, whereas confidence with diagnosis of urosepsis was unchanged (N = 45, p = 0.0871). Treatment confidence increased significantly for status asthmaticus (N = 47, p = 0.0009), status epilepticus (N = 48, p = 0.0005) and urosepsis (N = 48, p < 0.0001). Confidence for breaking bad news was not significantly changed after simulation (N = 47, p = 0.0689). **Conclusion:** Simulation training in our EM clerkship rotation significantly increased the confidence of medical students for certain common EM presentations, but not for all. Further work will aim to understand why some simulation scenarios did not improve confidence, and look to improve existing scenarios.

Keywords: clerkship, simulation, undergraduate medical education

P140

Investigating volunteer perspectives on leading patient-centred practices in the emergency department

L. Witt, BSc, T. Oyedokun, MBChB, MMed, D. Goodridge, BN, PhD, J. Stempien, MD, T. Graham, BSc, PhD, University of Saskatchewan, Saskatoon, SK

Introduction: Patient satisfaction is an essential component of effective delivery of quality care in the emergency department

(ED). Frequent reflection on current practices is required to detect areas in need of improvement. The Ontario Hospital Association (OHA) outlined five 'Leading Practices' (LPs) targeted to increase patient satisfaction in this setting. The ED volunteers are a group of individuals who have unique perspectives on ED practices that are unbiased by confounders affecting patients and staff. The goal of this study was to explore the unique perspectives of ED volunteers involving what they believe will improve the delivery of patient-centered care, as well as to examine to what extent Saskatoon EDs are embracing the principles outlined in the OHA LPs. **Methods:** A two-phase mixed methods approach, with a survey followed by interviews that allowed participants to expand on survey findings was used. The pool of 45 ED volunteers was extended the opportunity to participate resulting in 36 survey responses and 6 interviews. The 13 Likert-grade survey questions were generated to align to each of the LPs and allowed room for qualitative feedback. Interview questions were generated following 15 survey responses to expand on the LPs that were rated below average. **Results:** Analysis of responses identified inefficient ED processes leading to increased waiting times, inefficient patient location, inadequate signage, a lack of physical space, unclean environments, and a lack of staff and volunteer awareness regarding spiritual care and interpreter services, perceptions of received care by patients due to long wait times and level of cultural safety training of ED staff. Themes reduced from interviews yielded common themes such as patient frustration, disorganization, uncomfortable environment, overcrowding, prolonged wait times, and patient misconception of ED processes at Site 1. Themes common to Site 2 included organization, patient-friendly environment, patient misconception of ED processes, and prolonged wait times. Additionally, the volunteers suggested a plethora of interventions that could improve the current processes in Saskatoon's EDs to make them more patient friendly. **Conclusion:** Saskatoon EDs comply reasonably well to the OHA Leading practices. Surveying ED volunteers provides important insight into current practices and areas for improvement, and should be considered at other sites to improve adherence to the OHA LPs.

Keywords: emergency department, quality improvement and patient safety, volunteers

P141

Identifying causes of delay in interfacility transfer of patients by air ambulance

A. Wong, BA, BSc, MD, A. McParland, MSc, B. Nolan, MD, University of Toronto, Toronto, ON

Introduction: Vast geography and low population density limit availability of specialized trauma and medical care in many areas of Ontario. As such, patients with severe illnesses often require a higher level of care than local facilities can provide and thus require an interfacility transfer to access tertiary or quaternary care. In Ontario, Ornge, a provincially run air ambulance, serves as the sole provider of air-based medical and critical care transport. Patient outcomes are impacted by the time to definitive care, yet little research about reasons for delay in interfacility transfer within Ontario has been conducted. This study aimed to identify causes of delay in interfacility transport by air ambulance in Ontario. **Methods:** Causes of delay were identified by manual chart review of electronic patient care records (ePCR). All emergent adult interfacility transfers for patients transported by Ornge between Jan. 1-Dec. 31, 2016 were eligible for inclusion. Patient records were flagged to be manually reviewed if they met one or more of the following criteria: 1) contained a standardized

delay code; 2) the ePCR free text contained "delay", "wait", "duty-out", or common misspellings therein; 3) were above the 75th percentile in total transport time; or 4) were above the 90th percentile in time to patient bedside, time spent at the sending hospital, or time to receiving facility. Each trip was categorized as having delays that fall into one or more of the following categories: time-to-sending delays, in-hospital delays, and time-to-receiving/handover delays.

Results: Our search strategy identified 1,220 records for manual review and a total of 872 delays were identified. The most common delays cited included aircraft refuelling (234 delays); waiting for land EMS escort (144); and unstable patients requiring advanced care such as intubation, procedures, or transfusion (79). Other delays included handover or delays at the receiving facility (42); mechanical issues (36); dispatch-related issues (53); environmental hazards (43); staffing issues (47); and equipment problems (38). **Conclusion:** Some common causes of interfacility delay are potentially modifiable: better trip planning around refueling, and improved coordination with local EMS could impact many delayed interfacility trips in Ontario. Our analysis was limited by number and completeness of available records, and documentation quality. To better understand causes for delay, we would benefit from improved documentation and record availability.

Keywords: delay, medical transport, prehospital care

P142

Gaps in public preparedness to be a substitute decision maker and the acceptability of high school education on resuscitation and end-of-life care: a mixed-methods study

M. Wong, MD, M. Medor, BHSc, K. Yelle Labre, BScHK, M. Jiang, MD, MSc, J. Frank, MD, MA(Ed), L. Fischer, MD, W. Cheung, MD, MMed, University of Ottawa, Department of Emergency Medicine, Ottawa, ON

Introduction: When a patient is incapable of making medical decisions for themselves, choices are made according to the patient's previously expressed, wishes, values, and beliefs by a substitute decision maker (SDM). While interventions to engage patients in their own advance care planning exist, little is known about public readiness to act as a SDM on behalf of a loved one. This mixed-methods survey aimed to describe attitudes, enablers and barriers to preparedness to act as a SDM, and support for a population-level curriculum on the role of an SDM in end-of-life and resuscitative care. **Methods:** From November 2017 to June 2018, a mixed-methods street intercept survey was conducted in Ottawa, Canada. Descriptive statistics and logistic regression analysis were used to assess predictors of preparedness to be a SDM and understand support for a high school curriculum. Responses to open-ended questions were analyzed using inductive thematic analysis. **Results:** The 430 respondents were mostly female (56.5%) with an average age of 33.9. Although 73.0% of respondents felt prepared to be a SDM, 41.0% of those who reported preparedness never had a meaningful conversation with loved ones about their wishes in critical illness. The only predictors of SDM preparedness were the belief that one would be a future SDM (OR 2.36 95% CI 1.34-4.17), and age 50-64 compared to age 16-17 (OR 7.46 95% CI 1.25-44.51). Thematic enablers of preparedness included an understanding of a patient's wishes, the role of the SDM and strong familial relationships. Barriers included cultural norms, family conflict, and a need for time for high stakes decisions. Most respondents (71.9%) believed that 16 year olds should learn about SDMs. They noted age appropriateness, potential developmental and societal benefit, and improved decision