

Introduction: Hospital shootings are rare events that pose extreme and immediate risk to staff, patients and visitors. In 2015, the Ontario Hospital Association mandated all hospitals devise an armed assailant Code Silver protocol, an alert issued to mitigate risk and manage casualties. We describe the design and implementation of ASSIST (Active Shooter Simulation In-Situ Training), an institutional, full-scale hybrid simulation exercise to test hospital-wide response and readiness for an active shooter event, and identify latent safety threats (LSTs) related to the high-stakes alert and transport of internal trauma patients. **Methods:** A hospital-wide in-situ simulation was conducted at a Level 1 trauma centre in downtown Toronto. The two-hour exercise tested a draft Code Silver policy created by the hospital's disaster planning committee, to identify missing elements and challenges with protocol implementation. The scenario consisted of a shooting during a hospital meeting with three casualties: a manikin with life-threatening head and abdomen gunshot wounds (GSWs), a standardized patient (SP) with hypotension from an abdominal GSW, and a second SP with minor injuries and significant psychological distress. The exercise piloted the use of a novel emergency department (ED)-based medical exfiltration team to transport internal victims to the trauma bay. The on-call trauma team provided medical care. Ethnographic observation of response by municipal police, hospital security, logistics and medical personnel was completed. LSTs were evaluated and categorized using video framework analysis. Feasibility was measured through debriefings and impact on ED workflow. **Results:** Seventy-six multidisciplinary medical and logistical staff and learners participated in this exercise. Using a framework analysis, the following LSTs were identified: 1) Significant communication difficulties within the shooting area, 2) Safe access and transport for internal casualties, 3) Difficulty accessing hospital resources (blood bank) 4) Challenges coordinating response with external agencies (police, EMS) and 5) Delay in setting up an off-site command centre. **Conclusion:** In situ simulation represents a novel approach to the development of Code Silver alert processes. Findings from ethnographic observations and a video-based analysis form a framework to address safety, logistical and medical response considerations.

Keyword: disaster preparedness, code silver, in situ simulation

P011

Discerning perceived barriers and facilitators to goals of care discussion in the emergency department: A survey of emergency physicians and residents

N. Argintaru, MD, S. Vaillancourt, MD, CM, MPH, L.B. Chartier, MD, CM, MPH, J.S. Lee, MD MSc, E. O'Connor, MSc, MD, P. Hannam, MD, H.J. Owens, MD, M. McGowan, MHK, L. Steinberg, MD, K. Quinn, MD, University of Toronto, Toronto, ON

Introduction: Patients presenting to the Emergency Department (ED) may require clarification of their goals of care (GOC) to ensure they receive treatments aligned with their values. However, these discussions can be difficult to conduct for multiple reasons, including lack of time in a busy ED, competing priorities and a limited relationship with the patient. Few studies have examined the perceived challenges faced by Emergency Physicians in conducting GOC discussions. This study sought to contextualize and discern the barriers and facilitators to having these conversations as reported by Emergency physicians. **Methods:** An interdisciplinary team of Emergency Medicine, Palliative Care and Internal Medicine providers developed an online survey comprised of multiple choice, Likert-scale and open-ended questions to explore four domains of GOC discussions: training; communication; environment; and personal beliefs. Invitations and scheduled reminders were sent to 275 ED physicians at six academic sites in a Canadian urban centre,

including 49 EM residents. **Results:** 105 (46%) staff physicians and 23 (47%) residents responded with similar representation from all sites. Differences were reported in the frequency of GOC discussions: 59% of staff physicians conduct several per month whereas 65% of residents conduct less than one per month. Most agreed that GOC discussions are within their scope of practice (92%), they feel comfortable (96%), and are adequately trained (73%) to have them; however, 66% reported difficulty initiating GOC discussions. 73% believed that admitting services should conduct GOC discussions, yet acuity was noted in the comments as a major determinant with initiating GOC discussions by ED physicians. Main barriers identified were lack of time, chaotic environment, lack of advanced directives and the inability to reach substitute decision makers. 54% of respondents indicated that the availability of 24-hour Palliative Care consults would facilitate GOC discussions in the ED. **Conclusion:** Emergency physicians are prepared to conduct goals of care discussions, but often believe they should instead be conducted by the patient's admitting service. Multiple perceived barriers to goals of care discussion in the ED were identified, and a majority of respondents felt that the availability of Palliative Care in the ED may facilitate these discussions.

Keywords: palliative care, barriers to care

P012

Québec emergency physicians propose priority solutions to improve rural emergency care

J. Audet, L. Lapointe, MA, M. Renaud, MA, C. Turgeon-Pelchat, MA, B. Mathieu, MD, R. Fleet, MD, PhD, Université Laval and CHAU Hôtel Lieu de Lévis, Lévis, QC

Introduction: In the province of Québec, roughly 20% of the population lives in rural areas. Rural emergency departments (EDs) face different challenges than their urban counterparts. Yet, few studies have sought to understand these challenges. This study aims to survey Québec's emergency physicians to: 1) identify problems specific to rural EDs, 2) find solutions for improving accessibility and quality of care offered in rural regions and, 3) rank solutions in order of priority. These results will allow data triangulation with other of our studies that seek to identify challenges faced by rural EDs and potential solutions. **Methods:** During the 2016 annual conference of the *Québec Emergency Physicians' Association*, we asked physicians and residents (including those from urban EDs), to complete a survey about the challenges faced by rural EDs. The survey contained two sections. The first took the form of open-ended questions in which respondents could write three challenges about accessibility and quality of care in rural EDs (objective 1) and three solutions to address these challenges (objective 2). The second section listed 11 potential solutions identified in our previous study. The solutions were ranked based on their priority level on a five-point Likert scale that ranged from "not a priority" to "an absolute priority" (objective 3). We added the total number of points for each solution and produced a ranking list. **Results:** Ninety-one physicians out of the 417 at the conference completed the survey; 58% came from urban EDs and 42% from rural EDs. Open-ended questions suggest that access to specialists and interfacility transfers are the principal challenges faced by rural EDs. The top five solutions identified as the highest priorities were: 1) care protocols, 2) improvement of interfacility transfers, 3) training with simulators, 4) targeted ultrasound and, 5) implementation of staff retention and recruitment strategies. **Conclusion:** This study is relevant and useful as roughly a quarter of attendants at the conference spontaneously volunteered to help identify and prioritize solutions to foster the accessibility and quality of care in rural EDs. Furthermore, it represents a stepping stone for our recently-launched

wide-scope study, Urgences Rurales 360, that aims to explore problems faced by every of the 28 rural EDs in Québec and the solutions that could be implemented to resolve them.

Keywords: rural, emergency, access

P013

What are the short-term goals of patients presenting the emergency department with an acute mental health complaint?

S. Barbic, PhD, W.G. MacEwan, MD, A. Leon, BSc, S. Chau, Q. Salehmohamed, BSc, B. Kim, BSc, B. Khamda, MD, V. Mernoush, MD, P. Khoshpouri, MD, F. Osati, MD, D. Barbic, MD, MSc, University of British Columbia, Vancouver, BC

Introduction: In the last year, Canada published its Strategy for Patient-Oriented Research (SPOR) to ensure that patients receive the right treatment at the right time. Approximately, one in five Canadians will experience a mental illness in their life time, with many presenting to the Emergency Department (ED) as their entry point into the system. In order to improve patient outcomes and focus on patient-identified priorities, the aim of this study was to identify the short-term goals of patients with an acute mental health complaint (AMHC) presenting to the ED. **Methods:** We prospectively recruited a convenience sample of patients presenting to an inner city, academic ED with an annual census of 85,000 visits. Patients provided written informed consent and completed a survey package that included questions about employment intentions and short-term life goals. We collated the goals and used a content analysis to summarize the frequency of themes that emerged. **Results:** This study reports on the preliminary data from 108 of the targeted 200 patients (mean age 39.7 ±13.6 years; 65% male). A total of 75% of participants reported being unemployed, 84% of whom reported that they would like to gain some form of employment in the near future. Over half the sample (52%) identified that they were not satisfied with their current housing situation. In addition to improving housing and obtaining work, improving mental health (n = 34), improving relationships with family or friends (n = 27), going back to school (n = 22) and managing addiction problems (n = 20) were identified as the most common short-term goals. Other goals/priorities included improving physical health, traveling, exercising, and eating better. **Conclusion:** This study provides new information about the priorities of adults presenting with AMHC to the ED. It also offers insight into how to collaborate with patients to build sustainable, accessible, and coordinated care pathways that can bring about positive changes in their lives. This information can be used to compliment current care for mental health problems, ensuring greater quality, accountability, and continuity of care for this vulnerable patient group.

Keywords: patient centered care, goals, mental health

P014

Palliative and end of life care education in Canadian emergency medicine residency programs: a national cross-sectional survey

J. Baylis, MD, D.R. Harris, MD, MHSc, C. Chen, MD, MEd, D.K. Ting, MD, A. Kwan, MD, K. Clark, MD, MMEd, D. Willisroft, MD, University of British Columbia, Kelowna, BC

Introduction: Palliative care is a broad approach to care for patients with serious or life-threatening illnesses. This includes relief of symptoms, such as pain, that interfere with a patient's quality of life. It therefore falls firmly within the realm of emergency medicine (EM). 94% of emergency physicians report a need for education in dealing with death and dying. Nevertheless, there are no generally agreed upon competencies for Canadian EM residents with regard to palliative care and end of life care in the emergency department (ED). We performed a

cross-sectional study of Canadian EM residency programs to measure the existing curricula in palliative and end of life care. Our primary outcome was the prevalence of structured educational programs for palliative and end of life care. **Methods:** An e-survey was e-mailed to all program directors of both CCFP(EM) and EM post-graduate training programs countrywide, using FluidSurveys™. It included questions regarding current palliative and end of life care curricula from formal rotations to seminars and online modules. The survey was developed in consultation with the author group including specialists in education, palliative care medicine, emergency medicine, and medical education. Hired translators were employed to include French speaking programs in Canada. This study had ethical approval: Interior Health REB and UBC CREB certificate 2016-17-026-H. **Results:** The survey was open from October 12th to December 19th, 2016. During that time, we received 26 responses including 5 French speaking programs, for a response rate of 72.2%. The primary outcome was present in 38.5% of programs. There was no difference between FRCP and CCFP(EM) programs in the occurrence of the primary outcome (p = 1; Fisher's Exact Text). However, CCFP(EM) program directors commented that many of their residents had completed palliative care rotations in their family medicine training. The largest barriers to education included time (84.6%), curriculum development (80.8%), and availability of instructors (50.0%). **Conclusion:** Our preliminary analysis shows that few Canadian post-graduate EM programs have a structured educational program pertaining to palliative and end of life care. Current barriers to education that can be addressed in future curricular initiatives include lack of time, curriculum development, and instructor availability.

Keywords: end of life care, palliative care, resident education

P015

Leadership and administration: a novel elective rotation for emergency medicine residency training

J. Baylis, MD, D.R. Harris, MD, MHSc, M. Ertel, MD, K. Clark, MD, MMEd, University of British Columbia, Kelowna, BC

Introduction/Innovation Concept: In 2015, the Royal College of Physicians and Surgeons of Canada set out to redefine the CanMEDS roles including replacement of the "manager" role to that of the "leader". This was to highlight the fact that skills in leadership are crucially important as ongoing health care improvement occurs. This educational innovation was born out of a need for formal education in leadership and administration in post graduate emergency medicine training. **Methods:** Few post graduate emergency medicine training programs in Canada have leadership and administrative curricula involving either longitudinal or discrete 4 week rotations. We sought to create an evidence based leadership and administrative experience based on the CanMEDS roles. We adapted components of pre-existing rotations from other universities and selected competencies from Thoma et al in order to compile a list of objectives. This was coupled with a reading list, various departmental, hospital, and regional meetings, a physician leadership training seminar, a departmental presentation, and a leadership project. **Curriculum, Tool, or Material:** The curriculum involved 4 weeks combining 8 emergency department (ED) clinical shifts with a leadership and administration component. The latter involved clinical interdepartmental meetings, a hospital medical advisory council (MAC) meeting, a provincial medical directors meeting, a health authority MAC meeting, and taking part in planning for an ED quality improvement initiative focused on triage. Attendance at a 2-day physician administrator leadership training seminar was also included. The reading list included books on leadership and references to ED quality improvement. In addition, exposure to a B.C. Ministry of