learners experience compared to stationary simulation center **Conclusion:** Input from a heterogeneous group of simulation users was sought to help prioritize key features in the development of the Mobile Telesimulation Unit. Although statistically the study did not reach consensus, valuable feedback was compiled and pragmatically applied in the iterative development cycle.

Keywords: simulation-based medical education, simulation education, telemedicine

P040

Describing antibiotic utilization and uptake of the chronic obstructive pulmonary disease order set in Saskatoon emergency departments

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Introduction: Chronic obstructive pulmonary disease (COPD) is one of the leading causes of morbidity and mortality in Canada. The Anthonisen criteria utilizes the cardinal symptoms of acute exacerbations of COPD (AECOPD), increased shortness of breath, increased sputum production, and increased sputum purulence, to determine which patients should receive antibiotics. In July 2015, a COPD Order Set Pilot was implemented in Saskatoon emergency departments (ED). The order set utilizes the Anthonisen criteria to optimize AECOPD patient management and ensure appropriate antibiotic usage. By January 2019, we aim to optimize AECOPD patient management in Saskatoon ED. We aim to increase physician uptake of the order set to 50% and to increase appropriate antibiotic prescription to 90%. **Methods:** Our project was designed following the Plan-Do-Study-Act method. Our primary outcome was to measure the rate of appropriate antibiotic prescription when managing AECOPD patients. Our secondary outcome was to measure physician uptake of the order set. We believed that a standardized order set would optimize patient care. We hypothesized that 80% of AECOPD patients would be managed with antibiotics appropriately and that 25% of emergency physicians would utilize the order set. A chart review was conducted examining AECOPD patient management in Saskatoon ED. The study period included the 6 months following the implementation of the order set. Our inclusion criteria were patients diagnosed with AECOPD and managed in the ED. Our exclusion criteria were patients currently prescribed antibiotics or patients requiring inpatient admission. A convenience sample of 125 charts was selected for review, enabling an accurate representation of order set utilization and antibiotic usage. A secondary reviewer abstracted a random 15% sample of the charts to ensure validity of the data. **Results:** Our results showed that, during our study period, none of the AECOPD patients were managed with the order set. Of the patients receiving antibiotic therapy, only 32 of the 53 (60.38%) met the Anthonisen criteria and were appropriately prescribed antibiotics. Of the patients not given antibiotics, 15 of the 42 (35.71%) met the Anthonisen criteria and should have been managed with antibiotics. These results refuted both of our hypotheses. **Conclusion:** As COPD is one of the leading causes of morbidity and mortality in Canada, proper management is crucial. Our results state that uptake of the order set is low and that antibiotic utilization is not optimized. These results demonstrate the need to modify and promote the current order set. We believe that by encouraging the use of the order set and streamlining the management guidelines, we can increase physician uptake. This will subsequently increase appropriate antibiotic prescription and improve AECOPD patient care. A second identical chart review for 2017 has been completed. Data analysis will be finalized prior to the conference.

Keywords: quality improvement and patient safety, acute exacerbation of chronic obstructive pulmonary disease, antibiotics

P041

Patient perspectives on emergency department use for acute atrial fibrillation: a qualitative study using the theoretical domains framework

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Introduction: Acute atrial fibrillation (AAF) is the most common arrhythmia managed in the Emergency Department (ED). Direct costs of AAF are primarily attributed to ED visits and subsequent admission to hospital. A better understanding of patients attitudes regarding ED attendance is necessary to develop strategies to improve the patient care experience while simultaneously reducing ED presentation and inappropriate hospital admissions. This study aims to describe patient perspectives on ED use for AAF using in-depth qualitative interviews. **Methods:** An interview template designed to explore why patients attend the ED for AAF was constructed based on the Theoretical Domains Framework, a theory-informed approach that utilizes 14 domains to describe influencers of behavior. We conducted audio-recorded, semi-structured interviews of patients following their presentation to the ED for management of AAF. Interviews were anonymized, transcribed and imported into NVivo for coding and analysis. Two independent reviewers used a direct approach to code participant statements. Discrepancies were resolved by a third party. Belief statements were generated and relevant domains identified based on high frequency scores, conflicting belief statements or evidence of strong influencing beliefs. **Results:** 12 patient interviews, mean age 63.1 years, 91.7% male, 75.0% recurrent AAF, were completed. Patients stated that they attended the ED because: 1) symptom severity; 2) they were instructed by physicians to attend the ED should their AAF recur; and 3) they were encouraged by family members to attend. Their primary goal was to have relief of their symptoms. There was no expectation of specialist consultation or admission to hospital. Even though most patients stated they were open to managing these episodes independently, they reported that they did not have the knowledge or tools to do so. **Conclusion:** Patients with AAF present to the ED because of their symptom burden, social influences (physician and family) and lack of other management options. This study demonstrates the need for development of patient self-management strategies which will empower patients in their disease management and may decrease future ED visits.

Keywords: acute atrial fibrillation

P042

Resuscitative endovascular balloon occlusion of the aorta (REBOA) in trauma: a systematic review

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Introduction: Trauma leading to uncontrolled hemorrhage of the torso in the critically injured patient can rapidly progress to decreased cerebral and cardiovascular perfusion and carries a significant morbidity and mortality. Given the non-compressible nature and difficult anatomic access of these injuries, obtaining hemostasis is often a challenge and non-surgical options are sparse. Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) is a rapidly administered emergency department intervention that allows transient source control of caudal

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torso hemorrhage while arranging definitive surgical management. Although initially postulated in the 1950s, limited research regarding its therapeutic use in trauma has been available until recently. Here, we present a systematic review of the literature pertaining to the use of REBOA in severe trauma. **Methods:** An experienced medical librarian searched electronic databases for terms relating to REBOA, aortic balloon occlusion, hemorrhage, trauma and shock. Articles were identified, screened, retrieved and reviewed in accordance with PRISMA systematic review guidelines. English case reports, case series, cohort studies, randomized-controlled trials, systematic reviews and meta-analyses pertaining to the use of REBOA in human trauma patients were included. Customized inclusion and data extraction forms were created and used to form an electronic database of relevant studies. **Results:** After exclusion of duplicates, 2147 potentially relevant articles were identified and screened by title/abstract and 136 articles meeting inclusion criteria were retrieved for full-text review. Final analysis of 26 articles included 5 case reports, 13 case series, 7 observational cohort studies and 1 systematic review. Data spanning 771 patients undergoing REBOA were collected (weighted average age: 49.5, gender: 67.7% male, injury severity score: 35.1). Where data available, REBOA increased systolic blood pressure by a weighted average of 54.7mmhg and overall survival was 32.6%. **Conclusion:** Limited evidence pertaining to the use of REBOA in severe trauma exists with the majority of available data coming from individual case studies and case series. By extension, quantitative analysis regarding outcome data of this intervention requires further research in the form of larger studies with subgroup analysis to identify the subset of patients for which REBOA may benefit and to further delineate the risks of implementing this intervention.

Keywords: resuscitative endovascular balloon occlusion of the aorta

P043

Standards for change: developing international minimum standards for the care of older people in the emergency department

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Introduction: Emergency departments (ED) across Canada acknowledge the need to transform in order to provide high quality care for the increasing proportion of older patients presenting for treatment. Older people are more complex than younger ED users. They have a disproportionately high use of EDs, increased rates of hospitalization, and are more likely to suffer adverse events. The objective of this initiative was to develop minimum standards for the care of older people in the emergency department. **Methods:** We created a panel of international leaders in geriatrics and emergency medicine to develop a policy framework on minimum standards for care of older people in the ED. We conducted a literature review of international guidelines, frameworks, recommendations, and best practices for the acute care of older people and developed a draft standards document. This preliminary document was circulated to interdisciplinary members of the International Federation of Emergency Medicine (IFEM) geriatric emergency medicine (GEM) group. Following review, the standards were presented to the IFEM clinical practice group. At each step, verbal, written and online feedback were gathered and integrated into the final minimum standards document. **Results:** Following the developmental process, a series of eight minimum standard statements were created and accepted by IFEM. These standards utilise the IFEM Framework for Quality and Safety in the ED, and are centred on the recognition that older people are a core population of emergency health service users whose care needs are different from those of children and younger adults. They cover key areas, including the overall approach to older patients, the physical environment and equipment, personnel and training, policies and protocols, and strategies for navigating the health-care continuum. **Conclusion:** These standards aim to improve the evaluation, management and integration of care of older people in the ED in an effort to improve outcomes. The minimum standards represent a first step on which future activities can be built, including the development of specific indicators for each of the minimum standards. The standards are designed to apply across the spectrum of EDs worldwide, and it is hoped that they will act as a catalyst to change.

Keywords: quality improvement and patient safety, geriatric emergency medicine, international standards

P044

Register to donate while you wait: assessing public acceptability of utilizing the emergency department waiting room for organ and tissue donor registration

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Introduction: Our study objectives were to assess the acceptability of using the emergency department (ED) waiting room to provide knowledge on, and offer opportunities for organ and tissue donor registration; and to identify barriers to the donor registration process in Ontario. **Methods:** We conducted a paper based in-person survey over nine days for eight hour blocks in March and April 2017. The survey instrument was created in English using existing literature and expert opinion, pilot tested and then translated into French. The study collected data from patients and visitors in an urban academic Canadian tertiary care ED waiting room. All adults in the waiting room were approached to participate during the study periods. Individuals waiting in clinical care areas were excluded, as well as those who required immediate treatment. **Results:** The number of attempted surveys was 324; 67 individuals (20.7%) refused to partake. A total of 257 surveys were distributed and five were returned blank. This gave us a response rate of 77.8% with 252 completed surveys. The median age group was 51-60 years old with 55.9% female. Forty-six percent were Christian (46.0%) and 34.1% did not declare a religious affiliation. Nearly half of participants (44.1%) were registered organ donors. The majority of participants agreed or were neutral (83.3%) that the ED waiting room was an acceptable place to provide information on organ and tissue donation. Further, 82.1% agreed or were neutral that the ED was an acceptable place to register as an organ donor. Nearly half (47.2%) agreed that they would consider registering while in the ED waiting room. A number of barriers to registering as an organ and tissue donor were identified. The most common were: not knowing how to register (22.0%), a lack of time to register (21.1%), and having unanswered questions regarding organ and tissue donation (18.7%). **Conclusion:** Individuals waiting in the ED are supportive of using the ED waiting room for distributing information regarding organ and tissue donation, and facilitating organ and tissue donation registration. Developing such a practice could help to reduce some of the identified barriers, including a lack of time and having unanswered questions regarding donation.

Keywords: organ and tissue donation

P045

Impact of post-intubation hypotension on mortality of patients in the emergency department (ED)

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