

the rise of Free Open Access Medical Education (FOAM). Although nearly all residents use FOAM resources, some criticize the lack of universal quality assurance. This problem is a particular risk for trainees who have many time constraints and incompletely developed critical appraisal skills. One potential safeguard is journal club, which is used by virtually all EM residency programs in North America to review new literature. However, EM resident perspectives have not been studied. Our research objective was to describe how residents perceive journal club to influence how they translate the medical literature into their clinical practice. Our research question was whether FOAM has influenced residents' goals and perceived value of journal club. **Methods:** We developed a semi-structured interview script in conjunction with a methods expert and refined it via pilot testing. Following constructivist grounded theory, and using both purposive and theoretical sampling, we conducted a focus group (n = 7) and 18 individual interviews with EM residents at the 4 training sites of the University of British Columbia. In total, we analyzed 920 minutes of recorded audio. Two authors independently coded each transcript, with discrepancies reconciled by discussion and consensus. Constant comparative analysis was performed. We conducted return of findings through public presentations. **Results:** We found evidence that journal club works as a community of practice with a progression of roles from junior to senior residents. Participants described journal club as a safe venue to compare practice patterns and to gain insight into the practical wisdom of their peers and mentors. The social and academic activities present at journal club interacted positively to foster this environment. In asking residents about ways that journal club accelerates knowledge translation, we actually found that residents cite journal club as a quality check to prevent premature adoption of new research findings. Residents are hesitant to adopt new literature into their practice without positive validation, which can occur during journal club. **Conclusion:** Journal club functions as a community of practice that is valued by residents. Journal club is a primary way that new evidence can be validated before being put into practice, and may act as quality assurance in the era of FOAM.

Keywords: free open access medical education, graduate medical education, qualitative research

P019

What happens to John Doe? Unidentified patients in the emergency department: a retrospective chart review

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Introduction: Patients who are not identified upon presentation to the emergency department (ED), commonly referred to as John or Jane Does (JDs), are a vulnerable population due to the sequelae associated with this lack of patient information. To date, there has been minimal research describing JDs. We aimed to characterize the JD population and determine if it differs significantly from the general ED population. **Methods:** We conducted a retrospective chart review of 114 JDs admitted to Saskatoon EDs from May 2018 to April 2019. Patients met inclusion criteria if they were provided a unique JD identification number at ED admission because their identities were unknown or unverifiable. Data regarding demographics, clinical presentation, ED course, mode of identification, and major clinical outcomes (i.e. admission rates, mortality rates) were gathered from electronic records. A second reviewer abstracted a random 21.0%

sample of charts to ensure validity of the data. The JD population was then compared to the general population of ED patients that presented during the same time period. **Results:** Male JDs most commonly presented as trauma activations (85.7%) in contrast to female JDs who most commonly presented with issues related to substance abuse (51.4%). Compared to the general ED population, a greater percentage of JDs were categorized as CTAS 1 or 2 (85.8% vs 18.9%, $p < 0.0001$), more likely to be 44 years of age or younger (82.4% vs 58.5%, $p < 0.0001$), and more likely to be male (64.9% vs 49.1%, $p < 0.0001$). Descriptive statistics on the JD population demonstrated that most JDs received consults to inpatient services (58.8%). Of JDs who presented to the ED, 34.2% were admitted to hospital. The mortality of the JD population was 13.2% at 3 months. The ED average (SD) length of stay for JDs was 8.7 (9.0) hours. How JDs were ultimately identified was recorded only 70.2% of the time. Most frequently, JDs identified themselves (26.3%), other identification methods included police services (14.9%), family members (7.9%), registered nurses (6.1%), government-issued identification (5.3%), social work (4.4%) or other measures (5.4%). **Conclusion:** JDs represent a unique population in the ED. Both their presentations and clinical outcomes differ significantly from the generalized ED population. More research is needed to better identify strategies to improve the management and identification methods of these unique patients.

Keywords: emergency department, John Doe, unidentified patient

P020

Development and early experience with the Foothills Medical Center Pulmonary Embolism Response Team (PERT)

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Background: Pulmonary embolism (PE) is a common illness with significant mortality without appropriate treatment. Its disease severity is variable, difficult to prognosticate and triage of severe PE remains a patient safety concern. Some PE may benefit from invasive and advanced medical therapy, but these decisions require complex multi-disciplinary coordinated care. We have launched a multi-disciplinary rapid response team at the Foothills Medical Center Hospital (FMC) to assist prognostication, treatment, disposition planning, and followup for high-risk PE: The Pulmonary Embolism Response Team (PERT). **Aim Statement:** PERT has been implemented to improve patient-oriented outcomes however, as severe PE is infrequent, we initially target process measures. In the first year of PERT rollout, we aim for: 1) 100% of high risk PE be detected by emergency for PERT consult 2) PERT response be within 45 minutes of activation 3) PERT treatment and disposition be made within 1 hour of consult. 4) > 80% of patient dispositions match those informed by evidence-based risk stratification tools. **Measures & Design:** Through collaboration between emergency medicine, radiology, cardiac sciences, medical specialties and critical care, a collective evidence-based PE risk stratification/treatment pathway was developed. This has been disseminated to providers and embedding into electronic medical records (EMR) for computer assisted decision-making support. EMR data has been harmonized with standardized radiographic reporting for PE to cue reporting of high risk imaging findings. Standardized imaging and EMR prognostic factors flag high risk PE suggesting PERT activation. PERT standard operating

procedures have been developed, including evidenced-based pathways for further therapy, advanced imaging, and subspecialized disposition planning. Clinical services meet quarterly, and review dashboard summary data on clinical adverse events, resource utilization, and time data of patient flow to revise PE care pathways. **Evaluation/Results:** PERT activations occur approximately 2 times weekly. Adherence to operating procedures is high. Feedback post implementation cites improved adherence to evidence-based practice, clearer communication, and faster patient disposition. Quantitative analysis of performance is limited by infrequency of cases. **Discussion/Impact:** Our project shows feasibility of a PERT service. Pre-implementation data is collected, and we are currently measuring these post. We suspect signal of improved patient-oriented outcomes will be detected with more cases.

Keywords: pulmonary embolism, quality improvement and patient safety, thrombosis

P021

A novel way of hiding beds: manipulating wait time predictions to alter future patient flows into the ED

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Introduction: Wait time predictions have become more common in emergency departments in Canada. These estimate the wait times a patient faces to see providers and they are usually provided in an accessible way such as through an online interface. One purpose of these trackers is to improve ED system efficiency. Patients can self-triage to alternative care such as their primary care physician, defer care until a later time or could move from oversubscribed to undersubscribed EDs. However, these mechanisms could also be abused. If providers can artificially influence the wait time this may provide a possible lever to change patients flows to an ED. I investigate whether there is evidence suggestive of manipulation of online wait time trackers at an ED system in Ontario. **Methods:** Inputs into the wait time prediction algorithm, like patient volumes are taken from the ED EMR. This is the most likely place where staff can manipulate the wait time tracker by retaining patients in the EMR system even after they are discharged. I examine two sets of data to assess whether the online tracker displays differences in patient volumes from “true” data. The first is scraped data of patient volumes from the wait times website. The second are the accurate patient volumes from administrative data which includes when a physician discharged patients from the ED. I compare values of the true patient volumes to the online values and plot distributions of these differences. I also employ measures of accuracy such as mean square error and root mean square error to provide a value of how accurate the online data is compared to the true data. I examine these by ED and over time. **Results:** There are differences between the number of patients that are posted online and those in the administrative data. The distributions of these differences are skewed towards positive values suggesting that the online data more often overcounts rather than undercounts patients. Measures of accuracy increase during times when EDs are congested but do not decrease when EDs become less congested. This inaccuracy persists for a period after EDs cease to be busy. **Conclusion:** ED wait time trackers have the potential to be manipulated. When staff have incentive to reduce patient volumes, online data becomes more inaccurate relative to true data. This suggests that wait time trackers may have unintended consequences and that the information that they provide may not be entirely accurate.

Keywords: machine learning, predictions, wait times

P022

Use of police and SAR records to identify cases and reduce survivorship bias in prehospital care research

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Introduction: Evidence based medical practices are limited in pre-hospital care. A 2006 National Academies report on the state of pre-hospital care indicates that as little as 4% of prehospital care is evidence based. Retrospective case reviews are inexpensive studies that can effectively evaluate current practices and identify opportunities for improvement. Commonly, retrospective reviews in prehospital care rely on electronic health records from hospitals and emergency health services. These data sources suffer from three limitations; survivorship and inclusion biases, a lack of control cases, and difficulty identifying unusual etiologies in databases. Police and search and rescue records are uncommon but promising data sources for certain topics **Methods:** To test our methodology, we investigated outcomes of suicide attempts by jumping from bridges in Vancouver. We identified patients who threatened, attempted, or jumped from bridges >12m between 2006 and 2017. We describe the population, mortality and adverse outcomes, and identify factors differentiating survivors from fatalities. Police and Coast Guard (CG) records were searched to identify cases. Corresponding records from ambulance, hospitals, and the coroner were identified using date, time, and patient age and sex. Linked records were reviewed and key data extracted. **Results:** 1208 cases were identified, outcomes were positively identified for 90.3%. 273 were confirmed jumps. 78.2% of ambulance, 90.0% of hospital, and 93.6% of coroner records were identified and linked to corresponding police and CG records. By contrast, an independent search of ambulance records yielded a 99.42% false positive rate, and independent searches of hospital records were not possible due to technological limitations in patient data collection and storage tools. Further, of 197 cases where patients jumped into water, 94 were attended to by EHS, and 52 were transported to hospital. **Conclusion:** Police and CG records effectively identified patients. Without these data sources, identifying most cases would not have been possible. Since a majority of patients were not transported to EHS or hospital, linking data from these agencies to the hospital and EHS records limited survivorship bias. This methodology may be valuable in future prehospital and ED research, especially for topics with high likelihood of police or SAR contact like suicide attempts or avalanche burials.

Keywords: bias, data, prehospital

P023

Development of a Canadian Global Health Emergency Medicine (GHEM) Certificate Program based on established best practices

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Innovation Concept: Global health fieldwork is valuable for Canadian residents, but is often trainee-organized, short-term, unsupervised, and lacking in preparation and debriefing. In contrast, we have developed a Certificate Program which will be offered to University of Toronto (UofT) emergency medicine (EM) trainees in their final year of residency. This 6-month Program will complement the Transition to Practice stage for residents interested in becoming leaders in GHEM. **Methods:** We completed a multi-phase needs