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 prehospital care. A 2006 National Academies report on the state of prehospital 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