

reflecting 17% (10/58) of all linked PulsePoint activations and 31% (10/32) of all confirmed OHCAs. Of the remaining 48 cases that triggered PulsePoint activation numerous final paramedic problem codes were assigned of which 14% (8/58) were deemed alcohol intoxication, 10% (6/58) were active seizures, 7% (4/58) were behavioural/psychiatric events, among others. 10 incidents (17%) that triggered PulsePoint activation did not have an assigned final paramedic problem code. **Conclusion:** Implementation of PulsePoint is feasible in Canadian communities. Improved capabilities for linking with local EMS data will improve data capture, program monitoring capacity, and opportunity for research. The impact of PulsePoint on clinical outcomes remains uncertain and should be determined in future research.

**Keywords:** pulsepoint, out-of-hospital cardiac arrest, bystander cardiopulmonary resuscitation

#### MP11

##### Underreport of incident delirium in elderly patients treated in the emergency department

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**Introduction:** It is documented that physicians and nurses fail to detect delirium in more than half of cases from various clinical settings, which could have serious consequences for seniors and for our health care system. The present study aimed to describe the rate of documented incident delirium in 5 Canadian Emergency departments (ED) by health professionals (HP). **Methods:** This study is part of the multicenter prospective cohort INDEED study. Patients aged 65 years old, initially free of delirium with an ED stay 8 hours were followed up to 24h after ward admission. Delirium status was assessed twice daily using the Confusion Assessment Method (CAM) by trained research assistants (RA). HP reviewed patient charts to assess detection of delirium. HP had no specific routine detection of delirious ED patients. Inter-observer agreement was realized among RA. Comparison of detection between RA and HP was realized with univariate analyses. **Results:** Among the 652 included patients, 66 developed a delirium as evaluated with the CAM by the RA. Among those 66 patients, only 10 deliriums (15.2%) were documented in the patients medical file by the HP. 54 (81.8%) patients with a CAM positive for delirium by the RA were not recorded by the HP, 2 had incomplete charts. The delirium index was significantly higher in the HP reported group compared to the HP not reported, respectively 7.1 and 4.5 ( $p < 0.05$ ). Other predictive delirium variables, such as cognitive status, functional status, comorbidities, physiological status, and ED and hospital length of stay were similar between groups. **Conclusion:** It seems that health professionals missed 81.8% of the potential delirious ED patients in comparison to routine structured screening of delirium. HP could identify patients with a greater severity of symptoms. Our study points out the need to better identify elders at risk to develop delirium and the need for fast and reliable tools to improve the screening of this disorder.

**Keywords:** delirium, seniors, screening

#### MP12

##### Emergency department boarding: predictors and outcomes

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**Introduction:** Delays in transfer to an in-patient bed of admitted patients boarded in the ED has been identified as one of the chief drivers of ED overcrowding. Our study aims to replicate findings from a previous study in identifying patient characteristics associated with increased boarding time, and the impact of increased boarding time on in-patient length of stay (IPLoS). **Methods:** We conducted a retrospective single-centre observational study during the period between January 1, 2015 December 31, 2015 at a very high volume community hospital (~75,000 ED visits/year). All patients admitted from the ED to Medicine, Pediatrics, Surgery, and Critical Care were identified. The mean time to in-patient bed (TTB), as well as patient-specific and institutional factors that were associated with prolonged boarding times (12 hours) were identified. Mean IP LOS was calculated for those with prolonged boarding times and compared to those without prolonged boarding times. **Results:** There were 8,096 unique admissions during the study period. Patients admitted to the Medicine service exhibited significantly higher boarding times than those admitted to other services, with a mean boarding time of 17.4 hrs, as compared to 4.2 hrs, 5.7 hrs, and 4.0 hrs for those admitted to Surgery, Critical Care and Pediatrics respectively. Within Medicine patients, there was a statistically significant greater odds of prolonged boarding time for patients who were older, had a greater comorbidity burden, and required more specialized in-patient care (i.e. an isolation bed or telemetry bed). Medicine patients with prolonged boarding times also experienced 0.7 days longer IP LOS, even after correcting for age and comorbidity (mean adjusted IP LOS 10.6 days versus 11.3 days). **Conclusion:** Within our study period, older, sicker patients and those patients requiring more resource-intensive in-patient care have the longest ED boarding times. These prolonged 'boarding' times are associated with significantly increased IP LOS.

**Keywords:** emergency department overcrowding, patient safety, administrative database

#### MP13

##### Accuracy of Korean Triage and Acuity Scale when pain severity is used as a modifier

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**Introduction:** Accurate triage is important because under-triage may delay critical care for emergent patients and over-triage may inhibit efficient management of emergency department (ED) resources. In Korea, the Korean Triage and Acuity Scale (KTAS) was developed based on the CTAS in 2015. The purpose of this study was to evaluate the accuracy of KTAS in predicting patient's severity when degree of pain was used as a modifier. **Methods:** This was a retrospective observational cohort study, conducted in an ED of urban tertiary university hospital with more than 90,000 visits per year. We studied adult patients who visited the ED from January 2016 to June 2016. Patients were divided into pain group and non-pain group according to whether the degree of pain was used as a modifier in the KTAS evaluation. We used acute area registration, emergency procedure, emergency operation, hospitalization, intensive care unit admission, and hospital mortality as markers to determine urgent patients. To evaluate discriminative ability of KTAS, the odds ratios of each KTAS values compared to KTAS 3 for the urgent patients were calculated. And to compare the predictive power of KTAS for urgent patients between the two groups, the area under the receiver operating characteristic (ROC) curves were compared by DeLong's method. **Results:** There were 9,175 (37.8%) patients in the pain group and 15,078 (62.2%) patients in the non-pain group. When KTAS was assessed as 2, only 20.3% of the