

health issues over the past ten years. As usage of our Emergency Mental Health and Addictions Services (EMHAS) team continues to rise, it is increasingly important to understand the incidence of NSSI among our youth, explore if NSSI is reported at triage and identify characteristics that may distinguish these adolescents from others presenting for mental health assessment. **Methods:** This is an exploratory research study using retrospective data. Patients who had an Emergency Mental Health Triage (EMHT) form on their health record from an ED visit between June 1, 2017 and May 31, 2018 were eligible. Trained research assistants, using a structured data collection form in REDCap, abstracted data from the EMHT form, the EMHAS Assessment form, the Assessment of Suicide Risk Inventory and our CHIRPP (Canadian Hospitals Injury Reporting and Prevention Program) database. We calculated kappa values and 95% confidence intervals to describe the extent to which the forms agree with respect to identifying NSSI. We will compare the cohort who reports NSSI with the cohort who does not report NSSI using chi-square statistics depending. We will use descriptive statistics to characterize the NSSI patients. **Results:** During the one-year study period 955 patients had an EMHT form completed. In preliminary analysis 558 (58.4%) reported a history of NSSI. Patients reported NSSI on both the EMHT form and the EMHAS assessment form 64.7% of the time (kappa 0.56) indicating moderate agreement. In patients with NSSI, 9.5% of patients reported it only at triage and 25.8% of patients reported it only during their EMHAS assessment. Between group comparisons and descriptive analysis is underway. **Conclusion:** More than half of youth triaged with an emergency mental health complaint in our ED reported a history of NSSI. Screening at triage was moderately effective in identifying adolescents with NSSI compared to an in-depth assessment by the mental health team. Further research is needed to clarify how NSSI relates to risk for suicide.

**Keywords:** non-suicidal self injury

#### P020

##### **Impact of dexamethasone dose on return visits at a tertiary pediatric emergency department**

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**Introduction:** Croup is a common viral upper airway infection in children aged 6 months to 6 years. Although a single dose of dexamethasone decreases return visits, the prescribed dose varies from 0.15mg/kg to 0.6mg/kg. Our objective was to examine the effect of varied dexamethasone dosing on unplanned return ED visits for croup. **Methods:** This was a retrospective chart review of IWK ED patient treatment records from September 1, 2014 – August 31, 2016 of children aged 6 months to 6 years with an ICD-10 discharge diagnosis code of croup. Data were abstracted by trained research assistants using a structured data collection form in REDCap. A sample of 5% of charts had double data abstraction to test for agreement. Our primary outcome was return visits to the ED within 7 days. Secondary outcomes were ED length of stay (LOS), admission to hospital and admission to the pediatric intensive care unit (PICU). Data were analyzed using descriptive statistics and chi-square for between group comparisons. **Results:** The dataset included 1595 patient visits for croup. Data analysis is in progress. Triage acuity as per CTAS included: resuscitation n = 5; emergent n = 351; urgent n = 558; less urgent n = 605; and, non-urgent n = 2. Most patients had no co-morbid conditions (n = 1548). Dexamethasone dosing varied:

0.15 mg/kg n = 64; 0.3 mg/kg n = 838; and, 0.6 mg/kg n = 493. ED LOS was under 1 hour in 483 patients, 1-3 hours in 805, 3-6 hours in 225 and 6-12 hours in 9 patients. Few patients were admitted to hospital (n = 22) and no patients were admitted to PICU. Within 7 days of the index visit, 78 patients had an unplanned return visit to the ED for croup. **Conclusion:** The data analysis is in progress. This study will inform our future research on a practice change in our ED to comply with the dose of dexamethasone recommended by the Canadian Pediatric Society for the treatment of croup in 2017. **Keywords:** croup, return visits, steroid

#### P021

##### **Interventions to reduce emergency department door-to-ECG times: a systematic review**

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**Introduction:** We wished to identify emergency department interventions that lead to improvement in door-to-ECG times for adults presenting with symptoms suggestive of acute coronary syndrome (ACS). **Methods:** Two reviewers searched Medline, Embase, CINAHL and Cochrane CENTRAL from inception to April 2018 for studies in adult emergency departments with an identifiable intervention to reduce median door-to-ECG times when compared to the institution's baseline. Quality was assessed using the 'Quality Improvement Minimum Quality Criteria Set' (QI-MQCS) critical appraisal tool. The primary outcome was the absolute median reduction in door-to-ECG times as calculated by the difference between the post-intervention time and pre-intervention time. **Results:** Two reviewers identified 809 unique articles, yielding 11 before-after quality improvement studies that met eligibility criteria (N = 15,622 patients). The majority of studies (10/11) reported bundled interventions and most (10/11) showed statistical improvement in door-to-ECG times. The most common interventions were: having a dedicated ECG machine and technician in triage (5/11); improved triage education (4/11); improved triage disposition (2/11); and data feedback mechanisms (1/11). **Conclusion:** There are multiple interventions that show promise for reducing emergency department door-to-ECG times. Effective bundled interventions include having a dedicated ECG technician, triage education and better triage disposition. These changes, bundled together, can help intuitions attain best practice guidelines. Emergency departments must first understand their local context before adopting any single or group of interventions.

**Keywords:** door-to-ECG, quality improvement

#### P022

##### **A multimodal evaluation of an emergency department (ED) electronic tracking board utility designed to improve throughput by optimizing stretcher utilization**

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**Introduction:** Access block is a pervasive problem, even during times of minimal boarding in the ED, suggesting suboptimal use of ED stretchers can contribute. A tracking board utility was embedded into the electronic health record in Calgary, AB, allowing MDs and RNs to consider patients who could be relocated from a stretcher to