

Thematic analysis was used to group similar codes into themes. The analytic process was managed using the NVivo 11 software package. **Results:** Results: Eight nurses participated. All nurses were female and had a mean of 8.9 (range: 2.5 - 26) years of pediatric emergency nursing experience. Seven nurses had experience monitoring and administering INK to children for PSA. Five themes emerged: 1) attributes of INK, 2) INK effects on patients and families, 3) INK effects on health care providers, 4) INK effects on the ED environment, and 5) uncertainty regarding INK's effectiveness, predictability, and fit into institutional sedation protocols. Subthemes included 1) perceptions that INK produced a relatively shallower, slower-onset, and/or less titratable sedation, 2) the importance of patient cooperation (i.e. INK may be preferred by providers for older patients undergoing relatively painful or long procedures), 3) belief that INK was an effective anxiolytic and sedative with the potential to improve nursing resource utilization, and 4) belief that physician resistance to change and lack of personal familiarity were barriers to adoption. **Conclusion:** Conclusions: We identified clinical advantages to using INK in children, the importance of selecting appropriate patients, and barriers to widespread INK adoption. Importantly, our findings highlighted uncertainty about INK's effectiveness and incorporation into sedation protocols. Our findings will inform future knowledge translation strategies when implementing INK in the clinical setting. **Keywords:** children, intranasal, ketamine

#### P103

##### Factors associated with non-optimal resource utilization of air ambulance for interfacility transfer of injured patients

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**Introduction:** Timely access to definitive care has been associated with improved outcomes for injured patients. Air ambulance services have become an integral part of Canadian trauma systems to help provide earlier access to a lead trauma centre (LTC). Multiple factors can lead to non-optimal resource utilization resulting in potential transport delays. The goal of this study is to identify patient, institutional and paramedic risk factors for non-optimal resource utilization for interfacility transfers of injured adult patients transported by air ambulance to a LTC. **Methods:** Ornge is a paramedic-staffed organization that is the sole provider of air ambulance services from a non-trauma centre to a LTC for the province of Ontario, Canada. This is a retrospective cohort study of all Ornge adult emergent interfacility transports over a 5-year period. Data was collected on patient demographics and clinical status, sending facilities, transport details and paramedic qualifications. Optimal resource utilization was determined based on distance and historical times. A logistic regression model was used to explore patient, provider and institutional risk factors for non-optimal resource use. **Results:** Between January 1, 2013 and December 31, 2017 a total of 1777 injured patients underwent interfacility transport with Ornge. Of these 805 were identified as having non-optimal resource utilization. Patients who had an optimal resource use were found to be older and mechanically ventilated. Risk factors increasing odds of non-optimal transport included patients transported from a nursing station (OR 1.94), transport with primary or advanced care paramedics (OR 6.57 and 1.44, respectively) and transport between both 0800-1700 and 1700-0000 (OR 1.40 and 1.54, respectively). The median delay to arrival to receiving facility if a patient had a non-optimal resource use was 40 minutes **Conclusion:** We were able to identify several factors resulting in non-optimal

resource utilization. We believe that nursing stations as a sending facility and type of paramedics crew transporting patients resulted in non-optimal resource utilization mainly due to these patients being of lower acuity and this affecting their triage. However the timing of day is more likely to be a resource availability issue and something that can be further studied and potentially improved.

**Keywords:** emergency medical services, prehospital, trauma

#### P104

##### Can patients suffering traumatic cardiac arrest be identified using the National Ambulatory Care Reporting System (NACRS) database?

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**Introduction:** Trauma is a common cause of mortality across all age groups and is projected to become the third greatest contributor to global disease burden. Recent studies have demonstrated that survival from traumatic cardiac arrest (TCA) is more favourable than once believed and further research on this population is being encouraged. Currently, it is unclear whether existing databases, such as the National Ambulatory Care Reporting system (NACRS), which includes all emergency department visits, could be used to identify TCAs for population-based studies. We aimed to determine the accuracy of NACRS administrative codes in identifying TCA patients. **Methods:** This retrospective validation study used data acquired from NACRS and our institutional Patient Care System. We identified a number of International Classification of Diseases, tenth revision (ICD-10) diagnostic, procedural and cause of injury codes that we hypothesized would be consistent with TCA. NACRS was subsequently searched for patients meeting the diagnostic code criteria (January 1 - December 31, 2015). The following inclusion criteria were: an eligible ICD-10 diagnostic code or a qualifying Canadian Classification of Health Interventions (CCI) procedure code and an eligible ICD-10 external cause of injury code. Electronic medical records for these patients were then reviewed to determine whether true TCAs had occurred. **Results:** Eighty-five patients met the inclusion criteria and one was excluded from analysis due to inaccessible health records, leaving 84 patients eligible for chart review. Overall, 55% (n = 46) of patients were found to have true TCA, 35% (n = 29) sustained a cardiac arrest of non-traumatic etiology and 11% (n = 9) were considered "unclear" (i.e. could not determine whether it was a true TCA based on the medical records). We found that true TCA patients were most accurately identified using a combination of ICD-10 CA cardiac arrest and external cause of injury codes (Positive predictive value: 70.6%, 95% CI 46.9-86.7). **Conclusion:** TCA patients were identified with moderate accuracy using the NACRS database. Further efforts to integrate specific data fields for TCA cases within existing population databases and trauma registries is necessary to facilitate future studies focused on this patient population. **Keywords:** ambulatory care, cardiac arrest, trauma

#### P105

##### Charting in the electronic medical record: Perspectives of Emergency Medicine residents

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**Introduction:** The literature reveals that residents spend significant amounts of time working with and charting in electronic medical