

sustaining OHCA appear to have similar survival rates when compared with non-First Nations patients, suggesting similar baseline care. Interestingly, First Nations patients sustaining OHCA were significantly younger than their non-First Nations counterparts. This may reflect a higher burden of cardiovascular disease, suggesting a need improved prevention strategies.

**Keywords:** emergency medical services, First Nations, out of hospital cardiac arrest

#### P116

##### Impact of young age on outcomes of emergency department procedural sedation

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**Introduction:** Procedural sedation in the emergency department (ED) for children undergoing painful procedures is common practice, however little is known about sedation in very young children. We examined the effect of young age on sedation outcomes. **Methods:** This is a secondary analysis of an observational cohort study of children 0-18 years undergoing procedural sedation in six pediatric EDs across Canada. We compared pre-sedation state, indication for sedation, medications, sedation efficacy and four main post-sedation outcomes (serious adverse events (SAE), significant interventions, oxygen desaturation and vomiting) between patients who  $\leq 2$  years with those  $> 2$  years. Pre-sedation state, medications, indication for sedation and time intervals were summarized using frequency and percentage and compared with chi2 test. Logistic regression was used to examine associations between age group and outcomes. **Results:** 6295 patients were included; 5349 (85%) were  $> 2$  years and 946 (15%) were  $\leq 2$  years. Children  $\leq 2$  years were sedated most commonly for laceration repair (n = 450; 47.6%), orthopedic reduction (165; 17.4%) and abscess incision and drainage (136; 14.4%). Children  $> 2$  years were sedated most commonly for orthopedic reductions (3983; 74.5%). Ketamine was the most common medication in both groups, but was used most frequently in children  $\leq 2$  years (80.9% vs 58.9%;  $p < 0.001$ ). There was no difference in the incidence of SAE, significant interventions or oxygen desaturation between age groups, however children  $\leq 2$  years were less likely to vomit (Table 1). Young children had decreased odds of a successful sedation (OR 0.48; 95% CI: 0.37 to 0.63). On average, patients  $\leq 2$  years were sedated for 7 minutes less (74.1 vs 81.0  $p < 0.001$ ) and discharged 10 minutes sooner (90.1 vs 100.8  $p < 0.001$ ). Table 1  $\leq 2$  years (n = 946)  $> 2$  years (n = 5349) OR (95%CI)\* p-value n(%) n(%) Serious Adverse Event 8 (0.85) 59 (1.0) 0.76 (0.43-1.7) 0.477 Significant intervention 10 (1.0) 76 (1.4) 0.74 (0.34-1.4) 0.374 Oxygen Desaturation 50 (5.3) 303 (5.6) 0.93 (0.67-1.3) 0.640 Vomiting 14 (1.5) 314 (5.9) 0.24 (0.13-0.41)  $< 0.001$  \*Reference category:  $\leq 2$  years. **Conclusion:** Children  $\leq 2$  years most commonly received ED sedation for laceration repair using ketamine. Young age was not associated with a significant difference in SAEs, significant intervention or desaturation but was associated with decreased odds of vomiting and of successful sedation. **Keywords:** pain, pediatric, sedation

#### P117

##### Procedural skills training in emergency medicine physicians within the Edmonton zone: a needs assessment

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**Introduction:** Procedural skills are a key component of an emergency physician's practice. The Edmonton Zone is a health region that comprises eleven tertiary, urban community and rural community emergency departments (EDs) that represents over three hundred emergency physicians. We report the initial stakeholder and site leadership needs assessment used to inform the development of a comprehensive continuing professional development (CPD) procedural skills curriculum for the Edmonton Zone. **Methods:** A list of procedural skills was distributed to the two Edmonton Zone Clinical Department Heads of Emergency Medicine (EM). This list was based on a previous Canadian study that utilized procedures from the Objectives of Training in EM. Based on perceived needs, twenty-five procedures were chosen by consensus from zone leadership and study authors as the initial focus for a skills curriculum. This list was sent via survey to the physician site leads of all EDs in the zone. Each site lead was asked to indicate the fifteen procedure curriculum they felt would most benefit their respective physician groups. Responses were collated to look at all departments as a group and stratified by the type of ED (tertiary, urban and rural community). **Results:** Every site chief of Edmonton Zone EDs completed the survey (100% response rate). Cricothyrotomy and pediatric intubation were the two procedures prioritized by every site. One procedure (ultrasound guided central lines) was prioritized by 10/11 sites while three procedures (ultrasound guided central lines, adult intubation and chest tube insertion) were specified by 9/11 sites as needs. Two procedures (pericardiocentesis and thoracotomy) were named as priorities only by tertiary centers. Conversely, three procedures (extensor tendon repair, anterior and posterior nasal packing) were highlighted by all rural sites, but not consistently by any urban sites. **Conclusion:** Over the next few years, competency-based CPD will emerge for physicians in practice. Our preliminary needs assessment showed that while a common zone-wide curriculum will be possible, targeted curricula tailored to the unique needs of the various types of EDs will also be necessary. This has implications for the resources and teaching requirements needed to deliver effective and recurring CPD courses to an entire health region. A targeted needs assessment to all Edmonton Zone physicians will be the next step to verify and further elaborate on these preliminary results.

**Keywords:** continuing professional development, curriculum, simulation

#### P118

##### Older adults in the emergency department: a retrospective cross-sectional study of the geriatric population in Edmonton emergency departments

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**Introduction:** The geriatric patient population accounts for an ever increasing proportion of emergency department (ED) visits. Geriatric centered EDs are an emerging area of interest and research. Though there have been past studies looking at older patient presentations at individual hospitals, there is limited data describing geriatric presentations within an entire Canadian geographic health region. This study characterizes the population of older adults utilizing the EDs in the Edmonton Zone, a health region that comprises a total of eleven tertiary (T), urban community (UC) and rural community (RC) hospitals. **Methods:** This retrospective cross-sectional study targeted all patients  $\geq 65$  years presenting to the Edmonton Zone EDs between April 1, 2017 to March 31, 2018. Data was extracted from the