

throughout the hospital to mitigate confusion, time delay and unfamiliarity during difficult airway interventions. Participants felt the exercise was an effective means of practicing interprofessional communication and role clarity, and improved their attitude towards the same. **Conclusion:** In situ simulation-based education with ad hoc trauma teams can improve interprofessional communication and identify latent safety threats for the management of multisystem trauma patients.

**Keywords:** innovations in EM education, simulation, trauma

#### P074

##### Emergency department utilization and outcomes for patients with early pregnancy complications

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**Introduction:** Affecting roughly 1 in 5 pregnancies, early pregnancy loss is a common experience for reproductive-aged women. In Canada, most women do not establish care with an obstetrical provider until the second trimester of pregnancy. Consequently, pregnant patients experiencing symptoms of early pregnancy loss frequently access care in the emergency department (ED). The objective of this study was to describe the resource utilization and outcomes of women presenting to two Ontario EDs for early pregnancy loss or threatened early pregnancy loss. **Methods:** This was a retrospective cohort study of pregnant ( $\leq 20$  weeks), adult ( $\geq 18$  years) women in two EDs (one community hospital with 110,000 annual ED visits; one academic hospital with 65,000 annual ED visits) between January 2010 and December 2017. Patients were identified by diagnostic codes indicating early pregnancy loss or threatened early pregnancy loss. **Results:** A total of 16,091 patients were included, with a mean (SD) age of 32.8 (5.6) years. Patients had a total of 22,410 ED visits for early pregnancy complications, accounting for 1.6% of the EDs' combined visits during the study period. Threatened abortion ( $n = 11,265$ , 50.3%) was the most common ED diagnosis, followed by spontaneous abortion ( $n = 5,652$ , 25.2%), ectopic pregnancy ( $n = 3,242$ , 14.5%), missed abortion ( $n = 1,541$ , 6.9%), and other diagnoses ( $n = 710$ , 3.2%). 8,000 (44.8%) patients had a radiologist-interpreted ultrasound performed during the initial ED visit. Median (IQR) ED length of stay was 3.4 (2.3 to 5.1) hours. There were 4,561 (25.6%) return ED visits within 30 days, of which 2,317 (50.8%) occurred less than 24 hours of index visit, and 481 (10.6%) were for scheduled, next day ultrasound. The total number of hospital admissions was 1,793 (8.0%), and the majority were for ectopic pregnancy ( $n = 1,052$ , 58.7%). Of admitted patients, 1,320 (73.6%) underwent surgical interventions related to early pregnancy. There were 474 (10.4%) patients admitted to hospital during return ED visits. **Conclusion:** Pregnant patients experiencing symptoms of early pregnancy loss in the ED frequently had radiologist-interpreted US and low rates of hospital admission, yet had high rates of return ED visits. This study highlights the heavy reliance on Ontario EDs to care for patients experiencing complications of early pregnancy.

**Keywords:** early pregnancy loss, pregnancy, ultrasound

#### P075

##### Targeted temperature management was associated with worse outcomes of non-shockable out of hospital cardiac arrest

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**Introduction:** We sought to assess the effect of in-hospital targeted temperature management (TTM) on outcomes of non-shockable out-of-hospital cardiac arrest (OHCA). **Methods:** This is a secondary analysis of a randomized controlled trial "A Randomized Trial of Continuous Versus Interrupted Chest Compressions in Out-of-Hospital Cardiac Arrest" (NCT01372748). We included non-traumatic comatose OHCA with non-shockable rhythm who survived to hospital admission. Outcomes of interest were survival at hospital discharge and favorable neurological outcome (modified Rankin scale 0-3). We performed multivariable logistic regression, adjusting for baseline characteristics to determine the association between TTM and outcomes, compared to no TTM, for the entire cohort as well as for the propensity matched cohort. **Results:** Of 1,985 OHCA who survived to hospital admission, 780 (39.3%) were managed with TTM. In TTM patients, 7.3 % patients survived to hospital discharge and 3.9 % had a favorable neurological outcome in contrast to 10.2 % and 6.1 %, respectively, in no TTM patients. Multivariable analyses demonstrated an association between TTM and decreased probability of both outcomes, compared to no TTM (adjusted ORs for survival: 0.67 95% CI 0.48–0.93, and for favorable neurological outcome: 0.57 95% CI 0.37–0.90). Propensity score matched analyses demonstrate the similar results. **Conclusion:** TTM might decrease the probability of neurologically intact survival for non-shockable OHCA.

**Keywords:** non-shockable rhythm, out of hospital cardiac arrest, targeted temperature management

#### P076

##### Assessment of a newly integrated and standardized approach for pediatric concussions aimed to improve the concussion recovery process

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**Introduction:** Children with concussions presenting to emergency departments often receive very different recommendations for how to recover. In addition, there are no instructions for teachers on how children should return to learn and play after a concussion. Therefore, some children take too long to return to learn and play at school while others return too soon, thereby risking long-term problems because their brain injury is not fully healed. The purpose of this project is to determine the impact of a new integrated, standardized approach aimed to help a concussed child recover faster and whether the recovery experience for all involved has improved. **Methods:** Structured interviews were conducted with 11 parents of children treated for concussion at the Emergency Department of Pasqua Hospital in Regina, SK, four of whom received care after a change in practice whereby parents were provided with a return-to-school protocol form prior to discharge. Data were analyzed using an inductive qualitative content analysis approach using NVivo 12 software. **Results:** Three main categories were noted in the data: Parental response to the child's concussion, satisfaction with health services, and the communication amongst parents, physicians, and teachers. It was with regard to the last theme in particular that the impact of the return to school protocol was noted, helping to at least indirectly address the issue of the parent as the "middleman" in the communication triad. Most parents whose children received care prior to the introduction of the protocol suggested that providing written information at discharge to guide parents through the concussion recovery process would be helpful.