perform an initial univariate logistic regression, followed by a multi-variate analysis to identify predictor variables associated with adverse events such as recurrent ED visits, and admission to hospital or ICU for hyperglycemia within 30 days. We will include individual patients who have multiple recurrent visits to the ED during the study period and statistically weight for these using generalized estimating equations (GEE), which are used to develop regression models for correlated data that arise from repeated measures of the same individuals over time. Finally, a clinical risk tool will be derived by rounding the beta co-efficients. Internal validation will be conducted using bootstrapping techniques. **Importance**: ED visits for hyperglycemia significantly affect both the healthcare system overall and the individual patient. The results of this project will assist clinicians to better identify these patients and enable them to intervene either medically or educationally to prevent subsequent visits to the ED. As a result, patients will have improved care, better blood glucose control, and be identified for closer follow-up with a family physician or diabetes specialist. Furthermore, by aiming to reduce the number of recurrent visits, this project may reduce ED utilization and the associated healthcare costs with frequent visits and admissions for hyperglycemia.

Moderated Poster Presentations

MP01

The canary in the coal mine: Does palliative care consultation influence emergency department utilization?

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Introduction: For cancer patients undergoing active treatment, emergency department (ED) visits may be an indicator of a breakdown in continuity and quality of care. Palliative care (PC) may be an important resource for patients in need of symptom management even during treatment with curative intent. This study aims to describe ED utilization by cancer patients and determine if PC consults impact ED use. **Methods:** Patient data from the Tom Baker Cancer Center (TBCC) was linked to PC and ED data as a retrospective cohort study. ED data was obtained from two administrative databases and PC data was obtained from four administrative databases and restricted to the first four hundred days following diagnosis. Univariate and Multivariate analyses were used. **Results:** Three actively treated cancer patient cohorts were identified based on first presentation following intake at the TBCC: 1) Used ED first ($n = 1637$), 2) Used PC first ($n = 539$), and 3) Only used services at the TBCC ($n = 2153$). Using Multivariate analysis, patients living alone or who had a diagnosis of prostate or breast cancer were more likely to access the ED first or to only use services at the TBCC rather than access PC first. Patients who were divorced, on income support, or diagnosed with a lung or GI cancer, were more likely to access PC first rather than access the ED or only use services at the TBCC. A subgroup analysis was performed on those who accessed the ED at some point during their care, consisting of three groups: 1) ED Only Users ($n = 1091$), 2) ED First Users, who also accessed PC ($n = 546$), and 3) PC First Users, who also accessed the ED. There was a significant difference in rates of ED visits between the three groups: ED Only Users went to the ED at a rate of 3.8 per 1000 patient days; ED First Users, who also accessed PC, went to the ED at a rate of 7.7 per 1000 patient days; and PC First Users, who also accessed the ED, went to the ED at a rate of 9.2 per 1000 patient days ($p < 0.001$). **Conclusion:** In a tertiary cancer centre, patients who were divorced, on income support, or diagnosed with lung or GI cancer were more likely to

access PC. Amongst those patients who presented to the ED, those who accessed PC first had higher rates of ED use. Further explorations of presenting complaints, utilization patterns, and symptom burdens will be analyzed to determine if early PC consults can influence or decrease ED utilization.
Keywords: palliative care, cancer patients, utilization

MP02

Paramedic safety culture across Eastern Ontario

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Introduction: Safety culture is defined as the shared beliefs that an organization's employees hold relative to workplace safety. Perceptions of workplace safety culture within paramedic services have been shown to be associated with patient and provider safety outcomes as well as safe work practices. We sought to characterize paramedics' perceptions of the organizational safety culture across Eastern Ontario, Canada to provide important benchmarking data to evaluate future quality initiatives. **Methods:** This was a cross-sectional survey study conducted September 2015-January 2016 in 7 paramedic services across Eastern Ontario. We distributed an abridged version of Patterson's previously published EMS-SAQ survey, measuring six domains of workplace safety culture, to 1,066 paramedics during continuing medical education sessions. The questions were presented for rating on a 5 point Likert scale (1 = strongly agree, 5 = strongly disagree) and a response of 1 or 2 was considered a 'positive perception' response. We present descriptive statistics and chi-square tests where appropriate. **Results:** We received responses from 1,041 paramedics (97.6%), with a response rate varying between 88.0% and 100% across the 8 paramedic services. One third (33.6%) were Advanced Care Paramedics (ACPs) and 39.4% of paramedics had more than 10 years' experience. The percentage of positive responses for each domain were: Safety Climate 31.2% (95% CI 28.4-34.1), Teamwork Climate 29.3% (95% CI 26.6-32.1), Stress Recognition 56.8% (95% CI 53.8-59.8), Perceptions of Management 67.0% (95% CI 64.0-69.8), Working Conditions 42.6% (95% CI 39.6-45.7), Job Satisfaction 41.6% (95% CI 38.6-44.6). Primary care paramedics had more positive perception responses for Job Satisfaction (45% vs 35%, $p = 0.002$), whereas ACPs had more positive perception responses for Stress Recognition (61.5% vs 54.1%, $p = 0.022$). No association was found between gender or years of experience and a positive perception of any safety domain. **Conclusion:** The results provide valuable workplace safety culture data that will be used to target and evaluate needed quality improvement initiatives while also raising some awareness to paramedics of important factors related to patient and provider safety.
Keywords: paramedic, safety culture, patient safety

MP03

Predicting survival after pediatric out-of-hospital cardiac arrest

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Introduction: Pediatric out-of-hospital cardiac arrest (OHCA) is unique in terms of epidemiology, treatment, and outcomes. There is a paucity of literature examining predictors of survival to help guide resuscitation in this population. **Objective:** The primary objective was to examine predictors of survival to hospital discharge. The secondary objective was to determine the probability of return of spontaneous circulation