review. **Results:** Between May 2012 and May 2015, 280 cases (205 prospective and 75 retrospective) of anaphylaxis were identified from a total of 182,408 ED visits. The median age was 36.21 years (IQR 27.8), 61.8% were female, and 12.5% of all patients were children (<18 years old). The majority of reactions were triggered by food [54.3% (95% CI:48.5-60.1%)], followed by medications [18.2% (95%CI:13.7-22.7%)] and venom [5.7% (95%CI:3.0-8.4%)]. Among all cases, 66.8% (95% CI:61.3-72.3%) received epinephrine; 26.1% (95%CI:21.0-31.2%) received it prior to their arrival and 46.8% (95%CI:41.0-52.6%) in-hospital. As for other in-hospital treatments, 85.4% of patients (95% CI:81.3-89.5%) received corticosteroids, 81.1% (95%CI:76.5-85.7%) received H1 antihistamines, and 41.1% (95%CI:35.3-46.9%) received H2 antihistamines. Out of all patients who had anaphylaxis, 86.4% (95% CI:82.4-90.4%) were prescribed an epinephrine auto-injector in-hospital or had already had one prescribed. **Conclusion:** Our results reveal that food is a major trigger of anaphylaxis and that despite current guidelines, there is under use of epinephrine and preferential use of corticosteroids and antihistamines.

Keywords: anaphylaxis, treatment

P092

Clinical performance feedback to paramedics: what they receive and what they need

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Introduction: Clinical performance feedback is not always well utilized in healthcare, despite its potential in continual professional development to improve provider performance in healthcare settings. In order to more effectively incorporate performance feedback, we must evaluate the strengths and flaws of current feedback systems and determine best practices. With this goal, we sought to explore the perspectives of paramedics on the feedback they want and what they currently receive. **Methods:** We used a qualitative methodology with semi-structured interviews. A convenience sampling of practicing paramedics in the Niagara region was interviewed. We used an interpretive descriptive technique with continuous recruitment of participants until thematic saturation was achieved. Themes were identified and a coding system was developed by two investigators separately to code themes and sub-themes. These two systems were merged by consensus. We conducted a member check by contacting participants to determine if they agreed with our analysis. **Results:** 12 paramedics were interviewed. In our analysis we found several themes: positive perception/aspects of feedback and current feedback systems, current barriers, shortcomings of current systems, desire to know patient outcomes, and mental health as it relates to feedback. Positive perception of feedback has included asking for feedback, specific requests for feedback and strengths of current systems. Perceived barriers to feedback included issues around: confidentiality, practical limitations and social barriers. The limitations of current feedback systems noted the lack of feedback, and the questionable value of the feedback received. The desire to know patients' clinical course/outcomes was also a recurrent theme, with paramedics spontaneously expressing desire for feedback specific to cases, greater insight into the ultimate diagnosis and knowledge of outcomes. The mental health of paramedics was frequently discussed as well, including positive impact on job satisfaction and confidence and potential for negative impact. **Conclusion:** We have explored and generated a description of the perspectives of paramedics on feedback in general and the clinical performance feedback they currently receive. The information gained will lay the groundwork for improved feedback systems to provide paramedics with the feedback they want to continually improve as healthcare providers.

Keywords: feedback, paramedic, quality improvement

P093

The effect of Alberta's new impaired driving legislation on motor vehicle-related trauma

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Introduction: Motor vehicle collisions (MVCs) resulting in injuries and death disproportionately involve impaired drivers. Those under the influence of alcohol also have a much higher rate of presentation and admission to hospital for traumatic injuries. In an attempt to decrease impaired driving and consequently alcohol related MVCs and injuries, the government of Alberta recently introduced more strict legislation in the summer of 2012 for drivers found to be under the influence of alcohol. However, it has yet to be seen what impact the enforcement of this new legislation has had on traumatic injuries secondary to MVCs and alcohol impairment. The objective of this study was to assess the relationship between the implementation of Alberta's new impaired driving legislation and the number of alcohol-related motor vehicle traumatic injuries presenting to the emergency department of a Level I Trauma Centre. **Methods:** A retrospective single centre cross-sectional chart review examining all adult patients presenting to the ED of a major trauma centre who: a) require trauma team activation or consultation and b) have a MVC related injury. Of those charts meeting these criteria, the proportion of patients with positive ethanol screens will be compared between the year before and after the new legislation being implemented. Patients will be identified using electronic medical record logs. **Results:** 938 total MVC related trauma patients were identified during the study period (468 prior to legislation enactment [2010-2012], 470 after [2012-2014]). 33.3% of these MVC trauma patients had positive ethanol screens prior to the legislation enactment and 32.4% after (a non significant decrease). Interestingly, with a secondary analysis on a year by year basis, the trends appear to be more noteworthy. When comparing between 2010 and 2013 there was a statistically significant drop in the number of cases over legal limit by 7.74%. Subgroup analysis also demonstrated a large, statistically significant drop in 16-24 yr old cases between 2010 and 2013, from 29 to 11% (a 62% drop). **Conclusion:** While an impact was not seen immediately following the enactment of Alberta's new impaired driving legislation, a year by year analysis demonstrates a statistically significant decrease in MVC related trauma involving alcohol in the years following the new law. Of note, a substantial 62% drop was seen in the 16-24 year old age category.

Keywords: motor vehicle, trauma, alcohol

P094

The frequency of stroke risk assessment tools used to assess patients presenting to the emergency department with atrial fibrillation and flutter

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Introduction: Acute atrial fibrillation or flutter (AFF) is the most common dysrhythmia managed in the emergency department (ED). A key component of managing AFF in the ED is the prevention of stroke. Predictive indices (e.g., $CHADS_2$, HAS-BLED) should be used to assess each patient's risk of stroke and bleeding to determine the appropriate anticoagulation therapy. The frequency of use of these predictive indices in the emergency department to determine appropriate

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anticoagulation therapy remains unclear. This systematic review is designed to examine the use of risk scores in the ED to determine the management of patients presenting to the ED for atrial fibrillation and flutter. **Methods:** An extensive search of eight electronic databases and grey literature was conducted. Quasi-experimental studies were eligible for inclusion. Studies had to report on the ED management of adult patients presenting with AFF to be included. Two independent reviewers judged the relevance, inclusion, and risk of bias of the studies. Individual and pooled statistics were calculated as odds ratios (OR) with 95% CI using a random effects model and heterogeneity (I^2) was reported. **Results:** From 1,648 citations, 37 studies were included in this review. Heterogeneity was very high, precluding pooling. Only one of the included studies documented the use of $CHADS_2$ scores by attending physicians; while no studies documented the use of HAS-BLED. There was variability in the ED management strategies of AFF. The utilization of rhythm control in the treatment of AFF ranged considerable (OR: 0.04-9.84) in comparison to rate control. Of the 17 studies reporting cardioversion approaches, chemical (9 {53%}) cardioversion was the most common management strategy of AFF. **Conclusion:** Our results suggests that either few physicians are documenting stroke risk scores in adult patients with AFF, or that research studies assessing ED management of AFF are not reporting scores documented by the attending physicians. Future research needs to examine the use of stroke risk scores to determine the optimal and appropriate care for patients.

Keywords: atrial fibrillation, stroke, emergency department

P095

Who, what, where: a critical assessment of helicopter emergency medical services transport and transfer times on patient outcomes at two level 1 trauma centres

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Introduction: Helicopter emergency medical services (HEMS) have become an engrained component of trauma systems to expedite transportation to a trauma centre. Ornge is a provincially run, paramedic-staffed HEMS that is responsible for all air ambulance service within Ontario, Canada. They provide transportation for trauma patients through one of three ways: scene call, modified scene call or interfacility transfer. In this study we report the characteristics of patients transported by each of these methods to two level 1 trauma centres and assess for any impact on morbidity or mortality. **Methods:** A local trauma registry was used to identify all patients transported to our two trauma centres by HEMS over a 36-month period. Data surrounding patient demographic, arrival characteristics, transport times and in-hospital course were abstracted from the registry. Statistical analysis will be used to compare methods of transport and characterize any association between mode of transport and mortality. **Results:** From January 1st, 2012 to December 31st, 2014 HEMS transferred a total of 911 patients to our trauma centers with an overall mortality rate of 11%. Of these patients 139 were scene calls with a mortality rate of 8%, 333 were modified scene calls with a mortality rate of 14% and 439 were interfacility transfers with a mortality rate of 10%. **Conclusion:** Identifying any association between the type of HEMS transport and morbidity and mortality, we may be able to predict those that need more urgent transfer to a trauma centre and find ways to decrease our overall pre-trauma center time.

Keywords: trauma, helicopter emergency medical services (HEMS)

P096

Hospitalselfie: a review of implications and recommendations on patients making video recordings in hospital

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Introduction: Smartphones are everywhere. Recent technological advances allow for instantaneous high quality video and audio recordings with the touch of a button. In Canada, physician smartphone use is highly regulated by provincial legislature and multiple policies have been published from provincial physician colleges and the Canadian Medical Protective Association (CMPA). Patients on the other hand have no such laws to observe. We set out to look at what legislation and policies exist to provide guidance to physicians in two potential scenarios: when a patient requests to record a patient-physician interaction and if a patient surreptitiously records a patient-physician interaction without consent of the physician. **Methods:** A literature review searching for articles on patient video recordings and patient smartphone use was completed on both Medline and PubMed. Further review of each provincial privacy act and communication with each provincial privacy office was performed. Consultation with each provincial physician college and the CMPA was also done to identify any policies or recommendations to guide physicians. **Results:** Patients making video recordings do not fall under any provincial privacy law and there are no existing policies from any provincial physician college or the CMPA to provide guidance. Therefore, physicians must rely on their own institution's policy regarding patient video recording in the health care setting. Be familiar with your institution's policy. If your institution does not have a policy, create one with the input of appropriate stakeholders. Patients may surreptitiously video record medical interactions without physician consent. Although this may not be permitted under an individual institution's policy, it is not illegal under the Criminal Code. Thus, it is important to behave in a professional manner at all times and assume you may be recorded at any time. **Conclusion:** The majority of patients' recordings will be done without litigious intentions, but rather with the goal of understanding more about their own health and medical care. Unfortunately there are those who will undermine the physician-patient relationship. Physicians cannot allow this to cause distrust in future relationships, nor should it force physicians to practice more defensive medicine. Physicians must continue to practice the art of medicine and accept that "performance" is a part of the job.

Keywords: smartphone, video recordings, privacy

P097

Evaluation of an oral morphine protocol for treatment of acute pain crisis in sickle cell patients in the outpatient setting

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Introduction: Sickle cell vaso-occlusive crisis (VOC) is one of the most frequent causes of emergency visit and admission in children with this condition. With this study, we aim to evaluate whether the implementation of an oral morphine protocol has led to improved care of sickle cell disease (SCD), translated by a reduced hospitalization rate, an increased oral administration rate and faster opiate administration time, comparing cohorts of patients presenting to the emergency department (ED) and hematology outpatient clinic (HOC) with VOC pre and post implementation. **Methods:** Retrospective chart review of patients with SCD followed at CHU Ste-Justine, who presented to the ED and HOC with VOC, in the year pre and post implementation of the protocol.

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