project to implement an inter-professional team approach during handovers. **Methods:** This prospective QI project took place at an academic tertiary care centre with >160,000 ED visits/yr. An expert working group identified key components of the ideal morning handover, and developed an intervention consisting of standardizing the "location", "participants", and "time" components of our handover processes. A research assistant directly observed all 8am handovers for 2 weeks pre- and 2 weeks post-intervention. Outcomes include participant attendance; # of beside RN issues proactively brought forward; frequency of new allied health consults and/or involvement triggered; # of physician interruptions; and time metrics. We report descriptive statistics. **Results:** During the study period a total of 308 individual patient handovers were observed [Pre:162, Post:146]. Average duration of total handover each morning decreased from 24.9min to 16.3min ($p = 0.051$). Frequency of attendance at handovers increased for various allied health professionals, including care facilitators [Pre:35.7%; Post:91.7%, $p = 0.005$], social workers [Pre:7.1%; Post:66.7%, $p = 0.003$], geriatrics EM (GEM) RNs [Pre:64.3%; Post:83.3%, $p = 0.391$], pharmacists [Pre:0.0%; Post:58.3%, $p = 0.001$], and physiotherapists [Pre:0.0%; Post:58.3%, $p = 0.001$]. Number of specific beside RN issues proactively brought forward increased [Pre:0; Post:4, $p = 0.049$], while the number of physician interruptions during handover decreased [Pre:20; Post:0, $p < 0.0001$]. Frequency of new allied health consults and/or involvement triggered as a result of handover participation increased from 6.8% to 13.7% ($p = 0.057$). **Conclusion:** Implementation of a standardized team approach to morning handovers in the ED led to significant improvements in inter-professional contributions to patient care plans and overall efficiency. Future planned phases will build on this QI initiative by standardizing specific content of ED handovers.

Keywords: handover, patient safety, quality improvement

P071

Emergency physician attitudes and perceived barriers to take-home naloxone programs in Canadian emergency departments

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Introduction: Unintentional overdose is the leading cause of injurious death among Americans aged 25-64 years. A similar epidemic is underway in Canada. Community-based opioid overdose education and naloxone distribution (OOEND) programs distribute take-home naloxone kits to people at risk of overdose in several cities across Canada. Due to the high rate of drug-related visits, recurrent opioid prescribing, and routine encounters with opioid overdose, Emergency Departments (ED) may represent an under-utilized setting to deliver naloxone to people at risk of opioid overdose or likely to witness overdose. The goal of this study was to identify Canadian emergency physician attitudes and perceived barriers to the implementation of take-home naloxone programs. **Methods:** This was an anonymous web-based survey of physician and trainee members of the Canadian Association of Emergency Physicians. Survey questions were developed by the research team and piloted for face validity and clarity. Two reminder emails were sent to non-responders at 2-week intervals, per the modified Dillman method. Respondent demographics were collected and Likert scales used to assess attitudes and barriers to the prescription of naloxone from the ED. **Results:** A total of 347/1658 CAEP members responded (20.9%). Of the respondents, 62.1% were male and residents made up 15.6%. The majority (48.2%) worked in Ontario and 55.7% worked in an urban tertiary centre. Overall attitudes to OOEND were strongly positive: 86.6% of respondents identified a willingness to prescribe naloxone from the ED. Perceived barriers included allied health support for patient education (56.4%), access to follow-up (40.3%), and inadequate time in the clinical encounter (37.7%). In addition to people at risk of overdose, 78% of respondents identified that friends and family members may benefit from OOEND programs. **Conclusion:** Canadian emergency physicians are willing to prescribe take-home naloxone to at-risk patients, but better systems and tools are required to facilitate opioid overdose education and naloxone distribution implementation. This data will inform the development of these programs, with emphasis on allied health support, training and education.

Keywords: addiction medicine, opioids, naloxone

P072

Using the Bergman-Paris Question to detect ED seniors' cognitive impairment and functional status

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Introduction: Mild Cognitive Impairment (MCI) remains frequently undiagnosed and Emergency Department (ED) guidelines suggest screening for CI. The Bergman-Paris Question (BPQ) which is currently used in memory clinics, is a one-question screening test administered to the patient's relative; a negative answer suggests presence of CI. We sought to validate if the BPQ would be associated with MCI and functional status in ED elders. **Methods:** A planned sub-study of the prospective MIDI-INDEED study on ED-induced delirium, which included patients from 4 Canadian EDs was realized. Inclusion criteria were: patients ≥65 y.o., with and ED stay ≥8 hours, admitted to the hospital, non-delirious at the end of the first 8 hours and independent or semi-independent. Eligible patients were assessed in ED and at 60 days after ED visit using validated screening tests: the Telephone Interview for Cognitive Status-modified (TICS-m) for CI and the Older Americans Resources and Services scale (OARS) for functional status. The BPQ was asked at any time depending on the availability of a relative. Patients with a TICS-m score <31 are considered to have MCI. Data from patients with incident delirium, and those with documented dementia was individually analyzed. Univariate and multivariate analyses were used to ascertain outcomes. **Results:** 167 patients had a BPQ response, 126 (75.5%) were negative, and 41 positive (24.5%). For MCI, 40 (32.8%) patients of the negative group have a TICS-m below 31 comparatively to 6 (14.3%) for the positive group ($p = 0.2$). The BPQ was significantly associated with functional status. The mean OARS scores were 25.1 (3.9) in the negative group and 27.1 (1.3) in the positive group. This difference was maintained at 60 days. The number of delirium in the negative group was 24 (18%) vs 2 (5%) in the positive group ($p = 0.04$). **Conclusion:** BPQ could provide detection of MCI but further validation in a larger population is needed. BPQ was interestingly associated with ED-induced delirium and dementia. Detection of functional status and frailty shows good results. More research is needed to evaluate the usefulness of the BPQ "single" question for geriatric screening by ED professionals.

Keywords: mild cognitive impairment, delirium, emergency department

P073

Feasibility of emergency department targeted ultrasound for rib fracture diagnosis in minor thoracic injury

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Introduction: Rib fractures represent a frequent condition associated with Minor Thoracic Injury (MTI). Since the last decade, ultrasound have become an important part of emergency physician's (EP) daily practice, and its applications have become numerous. The main objective of this study was to evaluate the feasibility of Emergency Department Targeted Ultrasound (EDTU) for rib fracture diagnosis in patients with MTI. Secondary objectives were to 1) evaluate patients' pain during the EDTU procedure, 2) assess clinicians' degree of certitude over rib fracture diagnosis made by EDTU, 3) identify the limitations of the use of EDTU technique, and 4) compare the diagnosis obtained with EDTU to radiography results. **Methods:** Adult patients who presented with clinical suspicion of rib fractures after MTI were included. All patients underwent EDTU performed by emergency physicians (EP) prior to a rib view X-ray. Visual Analogue Scale (VAS) ranging from 0 to 100 was used to ascertain feasibility, patients' pain and clinicians' degree of certitude. Feasibility was defined as a score of more than 50 on the VAS. We also documented the radiologists' interpretation of rib view X-ray. Radiologists were blinded to the EDTU results. **Results:** Ninety-six patients were included. A majority (65%) of EP concluded that the EDTU technique to diagnose rib fracture was feasible (VAS score > 50). Median score for feasibility was 63. Median score was 31 (Interquartile range (IQR) 5-57) for patients' pain related to the EDTU examination and 72 (IQR 32-92) for the degree of certitude over the diagnosis made by EDTU. The main limiting factor of the EDTU technique was pain during patient examination (15%). **Conclusion:** EDTU examination appears to be a feasible technique for rib fractures diagnosis in the ED.

Keywords: ultrasound, Rib fracture, minor thoracic injury

P074

Impact of wearing a helmet on the risk of hospitalization after a sport injury

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Introduction: Six Canadian provinces recently made bicycle helmet mandatory and subsequent data concerning hospitalization rates after head injuries in cyclists were controversial. Furthermore, there remains an important proportion of participants who don't wear a helmet in sporting activity. We thus wanted to estimate the impact of helmet use in sport injuries on the risk of hospitalization. **Methods:** Study participants were patients of all age presenting at the emergency department of the Hôpital de l'Enfant-Jésus du CHU de Québec for a trauma that occurred in a sport in which it's possible to wear a helmet. Data were collected from information provided by the patient and from the Canadian Hospitals Injury Reporting and Prevention Program' (CHIRPP) database. Descriptive and multivariate analyses have been carried out using these data. We performed binomial logistic regression analyzes to estimate the risk adjusted for potentially confounding variables: age, sex and number of injuries. **Results:** Most patients included in the study (n = 169) were males (69.8%) aged between 10 and 30 years (50.3%). Sports most frequently involved in trauma were cycling (31.4%), downhill skiing (18.3%), snowboarding (14.8%), hockey (11.8%), and skateboarding (5.9%). Overall, 70.4% of patients were wearing a helmet at the time of injury. Helmet use in sports was associated with a reduction of 52% of the risk of hospitalization (RR: 0.48 [CI: 95%: 0.25-0.93]) after a trauma. In addition, patients not wearing a helmet had higher proportions of intracranial hemorrhage (10% vs. 1.7%) and skull fracture (8% vs 2.5%). **Conclusion:** Results suggest that helmet use decreases the risk of hospitalization for trauma sustained in sports in which it's possible to wear a helmet.

Keywords: helmets, sport injury, hospitalization rate

P075

Impact of pit-crew CPR following out-of-hospital cardiac arrest in Saskatoon

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Introduction: Between 1980 and 2008, survival rates following an out-of-hospital cardiac arrest (OHCA) have remained unchanged, averaging 7.6%. Despite the use of new and emerging technologies, new medications, and automated external defibrillators, survival remains low. Recently, a new focus in cardiopulmonary resuscitation (CPR) has shown dramatic improvements in survival post OHCA. This new model, called pit-crew CPR, focuses on minimizing interruptions in chest compressions and has each team member playing a specific role in the resuscitation, akin to the pit-crew of a car race. Certain districts in the United States and Canada have adopted the pit-crew, or a similar, high quality, maximum time-on-chest CPR model, with much success. We aim to determine whether the pit-crew model of CPR improves survival following OHCA in Saskatoon, SK. **Methods:** In Saskatoon, EMS and Fire crews respond to OHCAs and have been exclusively using the pit-crew model of CPR since Jan 1st, 2015. This study is a before and after retrospective chart analysis, comparing two groups - pre and post implementation of the pit-crew CPR model. The primary outcome is survival to hospital discharge post OHCA. Secondary outcomes include survival to admission and any return of spontaneous circulation (as per the Utstein definition). The inclusion criteria are patients >18 years old with a witnessed OHCA of presumed cardiac origin who receive CPR by EMS/Fire within the Saskatoon Ambulance service (MD Ambulance) catchment area. Patients were excluded if the OHCA was unwitnessed, or if there was a presumed non-cardiac cause for the arrest, e.g. trauma. **Results:** In the pre-pit-crew model cohort, between Jan 1st, 2011 and Sept 31st, 2014, 455 OHCAs were analyzed. In this cohort 10.5% survived to discharge, 31.9% survived to admission and ROSC was achieved in 39% of cases. The percentage of patients with initial rhythms of VF/VT, asystole or PEA were 28.5% (26%), 41.5% (1%) and 23.6% (10%) respectively, with survival to discharge shown in parentheses. The post-pit-crew cohort is still in the data collection phase. **Conclusion:** Our pre-pit crew cohort data has been collected and analyzed. With ongoing data acquisition for the post-pit crew cohort, we hope to have the full data set complete by the end of 2018. It will be at that time when we are able to determine whether the pit-crew model of CPR improves survival to discharge following OHCA in Saskatoon.

Keywords: resuscitation, prehospital, cardiopulmonary resuscitation (CPR)

P076

Delirium prevention in the emergency department using regional anesthesia with ultrasound guidance in the elderly population with hip fracture: a pilot study

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