

suggested as potential markers of these impairments in clinical studies. No study has examined if serum biomarkers could contribute to the diagnosis of frailty in seniors with minor injuries. **Objectives:** To explore the association between several serum biomarkers (Ferritin, Creatinine, Vitamin D, Albumin, Glucose, Estradiol, Testosterone, Thyroid Stimulating Hormone (TSH), Insulin-Growth Factor (IGF-1) C-reactive protein (CRP)) and frailty level in seniors treated in emergency department (ED) for minor injuries. **Methods:** Cross-sectional study within the larger CETI cohort. It includes 142 seniors discharged home from 4 EDs after treatment of minor injuries. Their frailty status was measured by the Canadian Study of Health & Aging-Clinical Frailty Scale (CSHA-CFS). Biomarkers were obtained from blood samples. Pearson's correlations ( $r$ ) were performed to examine the relation between serum biomarkers and frailty levels. Partial correlation controlled for age and sex, were also performed. **Results:** Due to inclusion criteria, no patient was severely frail. Overall, these preliminary analyses seem to indicate that robust patients tended to have lower Glucose & Vitamin D levels ( $-0.264 \leq r \leq -0.230$ ;  $p < 0.05$ ), higher Estradiol ( $r = 0.230$ ;  $p < 0.05$ ) & Testosterone ( $r = 0.295$ ;  $p < 0.05$ ), while prefrail/frail patients tended to have higher Glucose & Vitamin D levels ( $0.235 \leq r \leq 0.238$ ;  $p < 0.05$ ), lower Estradiol levels ( $r = -0.235$ ;  $p < 0.05$ ) & more elevated Ferritin levels. Due to the small number of patients, controlling for age and sex lead to non-significant results of the most associations. **Conclusion:** Pre-frail/frail seniors presenting to EDs with minor injuries tend to have higher Ferritin, Glucose & Vitamin D levels as well as lower sexual hormones levels than robust individuals. Larger samples are needed in order to elucidate which biomarkers could be most useful to identify frail seniors needing clinical attention and to assess a possible association with mobility impairments in this population.

**Keywords:** functional decline, biomarkers, frailty

#### P008

##### Addressing chronic pain and problematic substance use of opioids in the emergency department: can a comprehensive framework for care work?

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**Introduction:** Chronic pain and substance misuse are complex chronic illness that are subject to prejudice, misinterpretation and cultural biases. They require a broad, multi-disciplined approach if they are to be effectively managed. Barrier's to effective care in the emergency department include our reliance on pain scales alone to effectively triage and manage chronic pain, differing philosophy's and attitudes regarding the appropriate use of high risk pain pharmacology including opioids and confusing classifications systems used to describe pain and problematic substance use which can often lead to further stigmatization and over medicating. **Methods:** The charts of thirteen patients with complex pain and problematic substance use who had more than 360 visits to a regional emergency department in one year were reviewed retrospectively and data collected regarding frequency of visits and disposition after the implementation of a comprehensive pain and addiction strategy from April 2011 to August 2015. **Results:** In the first year of implementation there was a 70% drop in the frequency of emergency department visits. Five patients (38%) required a comprehensive pain plan. Six agreed (46%) to a direct referral to our mental health, addiction and chronic pain services. Two patients (15%) were lost to follow-up. Review of the electronic record to track patient visits to provincial emergency departments did not show an increase in visits to other facilities within the province. Review of visits in 2015 show a 97% drop in the frequency of visits. Family Physicians in the

community did not report an increase in the frequency of patient visits as a direct result of the implementation of this strategy nor was there an increase in complaints to administration regarding ineffective pain management. **Conclusion:** Although survey numbers are low it suggests that a framework for the management of complex pain and substance use disorders can be successfully implemented in the emergency department improving timely access to appropriate management and resources for patients based on best practice to address their complex needs.

**Keywords:** complex pain, substance use disorders, comprehensive care plan

#### P009

##### Violence against health care professionals in Karachi: results from a mixed methods study

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**Introduction:** The right to live is the supreme human right and according to Article 3 of the Universal declaration of human rights everyone has a right to life, liberty and security. In Karachi, Pakistan huge numbers of health care professionals (HCP) have been subjected to violence inclusive of money extortion, kidnapping, mental & physical torture, murders etc. A recent study from Karachi's four major hospitals reported that 72.5% of HCP have experienced abuse (verbal and physical) in the past 12 months. The goal of this study was to develop strategies for preventing violence against health care after collecting baseline data. **The objectives of the study were to:** Identify the magnitude, threshold and impact of violence against HCPs. **Methods:** This was a mixed methods study design with a QUAN-QUAL approach. Structured questionnaire was used after pilot testing and filled by the surveyors. Focus group discussion and In-depth interviews were conducted with HCPs, NGOs, Law enforcement agencies, ambulance services, hospital administrators and LHW programs. Frequencies and proportions were compared for different cadres of HCPs for the quantitative data analysis. Thematic content analysis with inductive and deductive reasoning was used for analysing qualitative data. **Results:** Data on 822 HCPs revealed that 33% had faced violence and 49% had experienced it, 89% was verbal and 43% was physical abuse, 2% had died and 22% were injured. Ambulance services and physicians were the most common victims of violence. The main reasons were grouped as institutional, behavioral (victims and perpetrators) and general situation of the city. There is high acceptance of violence among HCPs and lack of training in dealing with it was the most common reason given. Sequelae included effects on victim, family, institution and the reporting agencies. The final paper will have complete details on the baseline and the recommendations proposed by the stakeholders. **Conclusion:** Violence faced by HCP's is a multifactorial complex issue. There is a dire need to design interventions which can help in addressing the behavioral, Institutional and sociopolitical factors promoting violence among HCP's. The interventions based on recommendations by the respondents have been developed and implementation has started as a pilot in the city of Karachi.

**Keywords:** violence, health care professionals, ambulance services

#### P010

##### Use of the emergency department by refugees under the Interim Federal Health Program

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**Introduction:** In June 2012, the federal government made cuts to the Interim Federal Health (IFH) Program that reduced or eliminated health insurance for refugee claimants in Canada. The purpose of this study was to examine the effect of the cuts on emergency department (ED) use among patients claiming IFH benefits. **Methods:** We conducted a health records review at two tertiary care EDs in Ottawa. We reviewed all ED visits wherein an IFH claim was made at triage, for 18 months before and 18 months after the changes to the program on June 30, 2012 (2011-2013). Claims made before and after the cuts were compared in terms of basic demographics, chief presenting complaints, acuity, diagnosis, presence of primary care, and financial status of the claim. **Results:** There were a total of 612 IFH claims made in the ED from 2011-2013. The demographic characteristics, acuity of presentation and discharge diagnosis were similar during both the before and after periods. Overall, 28.6% fewer claims were made under the IFH program after the cuts. Of the claims made, significantly more were rejected after the cuts than before (13.7% after vs. 3.9% before,  $p < 0.05$ ). The majority (75.0%) of rejected claims have not been paid by patients. Fewer patients after the cuts indicated that they had a family physician (20.4% after vs. 30% before,  $p < 0.05$ ) yet a higher proportion of these patients were still advised to follow up with their family doctor during the after period (67.2% after vs. 41.8% before,  $p < 0.05$ ). **Conclusion:** A higher proportion of both rejected and subsequently unpaid claims after the IFH cuts in June 2012 represents a potential barrier to emergency medical care, as well as a new financial burden to be shouldered by patients and hospitals. A reduction in IFH claims in the ED and a reduction in the number of patients with access to a family physician also suggests inadequate care for this population. Yet, the lack of primary care was not reflected in the follow-up advice offered by ED physicians to patients. **Keywords:** refugee, Interim Federal Health (IFH), international

#### P012

##### Equity of care between First Nations and non-First Nations patients in Saskatoon emergency departments

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**Introduction:** Studies have shown that First Nations patients have poorer health outcomes than non-First Nations patients. This has raised concerns that they receive unequal treatment from the health care system in general and the Emergency Department (ED) in particular. We sought to determine if there was such a difference and what it was so that it could be corrected. **Methods:** We performed a retrospective chart review to compare the care received by status First Nations and non-First Nations patients presenting to two hospital ED's (Royal University Hospital and St. Paul's Hospital) in Saskatoon, Saskatchewan with the chief complaint of abdominal pain and a Canadian Triage and Acuity Scale (CTAS) score of three. A total of 200 charts were reviewed (100 from each site and 100 from each group) by two medical students. One student was involved in blinding the charts; the other was responsible for analyzing the charts. Identifying information on the charts was redacted to blind the reviewer to the patient's group during the chart review. Data extracted from each chart included time to doctor, time to analgesia given, length of stay, referral for consultation, blood work, imaging, bounce backs, reassessment, physical and history exam, and final disposition. This data will then be compared between the two population groups to find if there is equality in care given. **Results:** Data is currently being analyzed and will be available for presentation at

CAEP 2016. **Conclusion:** The goal of our health care system is to provide the same level of excellent care to every patient that arrives in the ED. If care is not being provided equitably to First Nations patients this must be identified for it to be addressed. This study aimed to determine whether disparities in care exist. If they are found subsequent research could be done to determine why these differences exist while at the same time working to minimize and eliminate them for the benefit of First Nations patients.

**Keywords:** triage, First Nations, equity

#### P013

##### Inter-facility transfers for CT scans from a rural emergency department: a pilot study

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**Introduction:** Rural emergency departments (EDs) are an important gateway to care for the 20% of Canadians who live in rural areas. We recently reported that fewer than 15% of rural EDs in Canada have access to a CT scanner. Lack of CT scanners in rural hospitals can result in frequent inter-facility transfers and delays in diagnosing and treating life-threatening conditions. No recent study has examined this issue.

**Objective:** With a future larger study in mind, we did a pilot assessment of inter-facility transfers for CT scans from one rural ED and evaluated the quality of the data and feasibility. **Methods:** This pilot study was part of our province-wide study on rural emergency care. Criteria were having 24/7 physician coverage and acute-care hospitalization beds. The hospital was also selected for its proximity and local interest. Two medical students collected data from hospital databases to determine annual number of ED visits, ED transfers, proportion of transfers for CT scans, reasons for examinations, and transfer times from April 1, 2010 to March 31, 2015. Descriptive statistics were reported as well as data quality and feasibility indicators. **Results:** For each year from 2010 to 2014, there was an average of 13,341 ED visits, 444 inter-facility transfers, and 125 CT scans. Over the five years an average of 28% of the inter-facility transfers were for CT scans, and the majority were abdominal CT scans. Inter-facility transfer data was 100% accessible through hospital databases but inter-facility transfer times and final diagnoses were not. **Conclusion:** More than a quarter of inter-facility transfers were for CT imaging. The limited electronic data in this Quebec rural ED precluded analysis of inter-facility times. While further cost-benefit analysis is required, preliminary data suggests local CTs may save time, money and lives.

**Keywords:** rural emergency departments, computed tomography, inter-facility transfer

#### P014

##### An investigation to determine if being roomed next to a psychiatric patient affects patient satisfaction and perception of care in those not being evaluated for a psychiatric complaint

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**Introduction:** Nearly 12 million emergency department (ED) visits in the USA annually are related to a mental health and/or substance abuse condition. This is equivalent to 1 out of every 8 ED visits or 12.5 percent of all ED visits annually. States cut \$5 billion in mental health services from 2009 to 2012. In the same period, the country eliminated at least 4,500 public psychiatric hospital beds. This has led to an increase in psychiatric boarding. Boarding consumes scarce ED resources and prolongs the amount of time that all patients must spend waiting for services. The aim of this study is to determine if being