

repercussions as, in the event of an out of hospital cardiac arrest, these patients would be resuscitated by prehospital care providers. Strategies to increase awareness of the form as well as strategies to increase ease of access should be considered to avoid resuscitation that is against patient wishes.

**Keywords:** emergency medical service, resuscitation

#### P087

##### **Pilot project: Implementation of a peer support network for geographically distributed learners in the NOSM family medicine/emergency medicine residency program**

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**Innovation Concept:** Residents bear an enormous burden of responsibility for patient care which can lead to stress and mental exhaustion, especially in the face-paced and acute environment of emergency medicine (EM). In addition to numerous demands faced by EM residents, being a member of a geographically distributive residency program presents many unique challenges from a support and wellness perspective. To address these issues we sought to implement a video conferenced peer support network in hopes to foster wellness in the NOSM Family Medicine/EM program, where learners are commonly separated for training. **Methods:** Participants completed a pre-pilot questionnaire that strongly showed interest for this type of novel network. Furthermore residents conveyed that they are reluctant to access formal services and commonly rely on co-residents for support. This pilot program intends to decrease barriers that geography and stigma create that negatively hinder seeking support throughout medical training. Keeping the network small, consisting of only co-residents maintains a collegial and confidential environment that enables colleagues to provide relevant help to one another. Offering this outlet allows the opportunity to debrief and share unique experiences, which can lead to improved knowledge and wellbeing. **Curriculum, Tool or Material:** Informal, co-resident run and easy to access sessions are held twice monthly and average one hour in length. Discussion topics commonly include residency issues, difficult patient encounters and challenging situations. These sessions are conducted via video conferencing making them easily accessible from a distance and also from a comfortable and convenient environment of the participants choosing. Residents have commented that this is a helpful platform to discuss important issues while providing and safe and confidential resource to help cope with residency challenges. **Conclusion:** Further data analysis is underway as we are in the initial stages of implementing the program. In the final stages (April 2018) a pending post-pilot questionnaire will be interpreted to explore barriers, limitations and to determine the role of the network going forward. If found to be effective it is something that can be implemented and adapted for future residents. Other programs can use this feasible model to increase wellness and foster the same supportive environment among residents, especially those separated geographically from peers who may benefit most.

**Keywords:** geographical distributed learning, innovations in EM education, peer support network

#### P088

##### **Emergency physicians' approach to head CT scanning for elderly patients who fall: A survey of Canadian, American, British, and Australian emergency physicians**

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**Introduction:** The number of seniors presenting to emergency departments after a fall is increasing. Head injury concerns in this population often leads to a head CT scan. The CT rate among physicians is variable and the reasons for this are unknown. This study examined the role of patient characteristics and country of practice in the decision to order a CT. **Methods:** This study used a case-based survey of physicians across multiple countries. Each survey included 9 cases pertaining to an 82-year old man who falls. Each case varied in one aspect compared to a base case (aspirin, warfarin, or rivaroxaban use, occipital hematoma, amnesia, dementia, and fall with no head trauma). For each case, participants indicated how "likely" they were to order a head CT scan, measured on a 100-point scale. A response of 80 or more was defined a priori as 'likely to order a CT scan'. The survey was piloted among emergency residents for feedback on design and comprehension, and was published in French and English. Recruitment was through the Canadian Association of Emergency Physicians, Twitter and CanadiEM. For each case we compared the proportion of physicians who were 'likely to scan' with relative to the base case. We also compared the proportion of participants who were 'likely to scan' each case in the USA, UK and Australia, relative to Canada. **Results:** Data was collected from 484 respondents (Canada-308, USA-64, UK-67, Australia-27, and 18 from other countries). Social media distribution limited our ability to estimate of the response rate. Physicians were most likely to scan in the anticoagulation cases (90% likely to order a scan compared to 36% for the base case ( $p < 0.001$ )). Other features associated with increased scans were occipital hematoma (48%), multiple falls (68%), and amnesia (68%) (all  $p < 0.005$ ). Compared to Canada, US physicians were more likely to order CT scans for all cases ( $p < 0.05$ ). Compared to Canada, UK physicians were significantly less likely to order CT for patients in every case except in the patient with amnesia. Finally, Australian physicians differed from Canada only for the occipital hematoma case where they were significantly more likely to order CT scan. **Conclusion:** Anticoagulation, amnesia and a history of multiple falls appear to drive the ordering a head CT scan in elderly patients who had fallen. We observed variations in practice between countries. Future clinical decision rules will likely have variable impact on head CT scan rates depending on baseline practice variation.

**Keywords:** CT scan, elderly, survey

#### P089

##### **Multimodal oral analgesia for non-severe trauma patients: feasibility and evaluation of a triage-nurse directed protocol combining low-dose methoxyflurane, paracetamol and oxycodone**

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**Introduction:** Insufficient analgesia affects around 50% of emergency department patients. The use of a protocol helps to reduce the risk of oligoanalgesia in this context. Our objective was to describe the feasibility and efficacy of a multimodal analgesia protocol (combining paracetamol, oxycodone, and inhaled low-dose methoxyflurane) initiated by triage nurse. **Methods:** We performed a prospective, observational study in the emergency department at

Grenoble Alpes University Hospital (Grenoble, France) between October 2017 and April 2018. Non severe adult trauma patients with a numerical pain rating scale (NRS) score  $\geq 4$  and receiving MEOF were included. The primary efficacy criterion was the proportion of patients with an NRS score  $\leq 3$  at 15 min post-administration. Pain intensity was measured for 60 min as well as during radiography. Data on adverse events and satisfaction were also recorded. Data are presented as median [interquartile (IQR)] and were compared using non parametric tests. **Results:** A total of 200 adult patients were included (age: 32 [IQR: 23–49] years; 126 men (63%)). Patients presented at triage with a pain score of 7 [IQR: 6–8]. Sixty-six patients (33%) reported an NRS score  $\leq 3$  at 15 min post-administration. The time required to achieve a decrease of at least 2 points in the NRS score was 10 [IQR 5–20] min. The pain intensity was 4 [IQR: 2–5] before radiography and 4 [IQR: 2–6] during radiography. Adverse events were frequent ( $n = 128$ , 64%), mainly dizziness. No serious adverse events were reported and 89% of minor adverse events resolved at one hour. Both patients and health care providers reported good levels of satisfaction. **Conclusion:** The administration of a nurse-driven multimodal analgesia protocol combining paracetamol, oxycodone, and low-dose methoxyflurane was feasible on triage. It rapidly produced long-lasting analgesia in adult trauma patients.

**Keywords:** low-dose methoxyflurane, nurse-driven protocol, trauma pain

#### P090

##### A scoping review on patient race, ethnicity, and care in the emergency department

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**Introduction:** Health disparities between racial and ethnic groups have been well documented in Canada, the United States, and Australia. Despite evidence that differences in emergency department (ED) care based on patient race and ethnicity exist, there is a lack of scientific reviews in this important area. The objective of this review is to provide an overview of the literature on the impact of patient race and ethnicity on ED care. **Methods:** A scoping review guided by the framework described by Arksey and O'Malley was undertaken. This approach was taken because it was best suited to the goal of providing an overview of all of the literature, given the broad nature of the topic. All studies with primary outcomes considering the impact of patient race and ethnicity on "throughput" factors in the ED as defined by Asplin et al., were considered. Outcomes considered included triage scores, wait times, analgesia, diagnostic testing, treatment, leaving without being seen, and patient experiences. Literature from Canada, the United States, Australia, and New Zealand was considered. A database search protocol was developed iteratively as familiarity with the literature developed. Inclusion and exclusion decisions were made using an established model. **Results:** The original search yielded 1157 citations, reduced to 453 after duplicate removal. 153 full texts were included for screening, of which 85 were included for final data extraction. Results indicate there is evidence that minority racial and ethnic groups experience disparities in triage scores, wait times, analgesia, treatment, diagnostic testing, leaving without being seen, and subjective experiences. Authors' suggested explanations for these disparities can be placed in the following categories: (1) communication differences; (2) conscious or unconscious bias; (3) facility and resource factors in hospitals with higher minority presentation rates; and (4) differences in clinical presentations. **Conclusion:** This

scoping review provides an overview of the literature on the impacts of race and ethnicity on ED care. As disparities have been shown to exist in numerous contexts, further research on the impact of race and ethnicity in ED care is warranted, especially in the Canadian literature. Such explorations could aid in the informing and creation of policy, and guide practice.

**Keywords:** disparities, ethnicity, race

#### P091

##### Lumbosacral spinal imaging and narcotic prescription for patients presenting to the emergency department with non-traumatic low back pain

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**Introduction:** Choosing Wisely Canada guidelines suggest that in the absence of red flags or clinical indicators suggestive of serious underlying conditions, physicians should not order radiological images for patients presenting with non-specific low back pain, and current recommendations do not endorse routine prescribing of opioids for this condition. The objective of this study was to determine how many patients presenting to the ED with non-traumatic low back pain have spinal imaging and how many are discharged home on opioids. **Methods:** We conducted a retrospective medical record review for adult (>17 years) patients presenting to an academic tertiary care ED with non-traumatic low back pain from April 1st 2014 to March 31st 2015 (pre-guideline) and April 1st 2017 to March 31st 2018 (post-guideline). Patients were excluded if they were >70 years old, were not discharged home, had a traumatic injury, features of cauda equina syndrome, weight loss, history of cancer, fever, night sweats, chronic use of systemic corticosteroids, chronic use of illicit intravenous drugs, first episode of low back pain over 50 years of age, abnormal reflexes, loss of motor strength or loss of sensation in the legs. **Results:** 1060 (545 pre-guideline, 515 post-guideline) were included. Mean (SD) age was 39.6 (12.3) years and 549 (51.8%) were female. Pre-guideline, 45 (8.3%) patients had spinal imaging, compared to 39 (7.6%) post-guideline ( $\Delta 0.7\%$ ; 95% CI:  $-2.6\%$  to  $4.0\%$ ). Of the 84 (7.9%) patients who had spinal imaging, 4 (8.9%) had pathologic findings pre-guideline, compared to 10 (25.6%) patients post-guideline. The proportion of patients discharged home with a prescription for opioids was lower after the Choosing Wisely Canada guidelines (40.9% vs. 11.1%;  $\Delta 29.8\%$ ; 95% CI:  $24.8\%$  to  $34.7\%$ ). **Conclusion:** Choosing Wisely Canada guidelines did not appear to alter the rate of imaging for patients presenting to the ED with non-traumatic low back pain. Overall the rate of spinal imaging was lower than expected. The proportion of patients who were discharged home with a prescription for opioids was lower after the Choosing Wisely Canada guidelines, however we don't know if this represents an overall trend in the reduction of opioid prescribing, or a specific change in practice related to the ED management of low back pain.

**Keywords:** low back pain, opioids, spinal imaging

#### P092

##### Volunteer engagement in the emergency department: A scoping review

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