

significant differences were noted between groups when compared on the Maslach Burnout Inventory survey tool. Despite many factors differentiating urban from rural practice, rural emergency doctors suffer similar rates of burnout. Thematic qualitative interviews exploring specific burnout factors may offer further insight into the drivers of physician burnout.

Keywords: burnout

P013

Emergency medicine in dental practice: shaping an educational curriculum

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Introduction: There is increasing public demand for dentists and their professional regulators to mitigate medical risk to patients in private dental clinics – especially those that offer procedural sedation. Recent high-profile adverse events reported in the media suggest an urgent need to address this issue. However, there is a paucity of knowledge in the literature regarding how best to do so. We aim to explore opportunities for multidisciplinary emergency medical training of dentists, and to offer an informed perspective to assist with the preliminary development of a structured educational program. **Methods:** We employ Gioia Methodology, an established standard for inductive qualitative research and thematic analysis. Interviewees were recruited via email and selected to ensure a broad and knowledgeable perspective. We conducted individual semi-structured 1-hour interviews of 6 dentists, 4 medical anesthesiologists, 3 emergency physicians, and 1 oral and maxillofacial surgeon. Several interviewees had leadership roles in Canadian dental regulatory agencies and educational institutions. Data from these interviews was contemporaneously analyzed and organized into “first-order concepts”, “second-order themes” and “aggregate dimensions.” **Results:** Our findings demonstrated 12 first-order concepts. Dentists require “leadership from professional regulators”, and “accreditation by recognized training institutions” to “ensure competence in initial emergency medical care of patients”. “Customized training programs” led by “multidisciplinary instructors” – including emergency physicians – should ensure “pre-operative medical risk assessment”, “appropriate intra-operative patient monitoring”, and “the ability to recognize common medical emergencies”. Emergency medical skills training should focus upon “teamwork within the office”, “early activation of EMS”, “ABC skills”, and the administration of “emergency medications”. **Conclusion:** Dentists require a very broad skillset to safely manage patients in their practice, especially when procedural sedation is required. Our aggregate dimensions provide an overview of our recommendations: we suggest that dentists must work with their regulators and educators to “build upon an existing culture of patient safety” by fostering “competence in the prevention, recognition and initial management of medical emergencies” in the dental practice setting.

Keywords: dental practice, education, emergency care

P014

Incidental findings in trauma whole-body CT scans: a systematic review

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Introduction: Whole-body computed tomography scans (WBCT) are a mainstay in the work-up of polytrauma or multiple trauma patients in the emergency department. While incredibly useful for

identifying traumatic injuries, WBCTs also reveal incidental findings in patients, some of which require further diagnostic testing and subsequent treatment. Although the presence of incidental findings in WBCTs have been well documented, there has been no systematic review conducted to organize and interpret findings, determine IF prevalence, and document strategies for best management. **Methods:** A systematic review was conducted using MEDLINE, PUBMED, and EMBASE. Specific journals and reference lists were hand-mined, and Google Scholar was used to find any additional papers. Data synthesis was performed to gather information on patient demographics, prevalence and type of incidental findings (IFs), and follow-up management was collected. All documents were independently assessed by the two reviewers for inclusion and any disagreements were resolved by consensus. **Results:** 1231 study results were identified, 59 abstracts, and 12 included in final review. A mean of 53.9% of patients had at least one IF identified, 31.5% had major findings, and 68.5% had minor findings. A mean of 2.7 IFs per patient was reported for articles that included number of total IFs. The mean age of patients included in the studies were 44 years old with IFs more common in older patients and men with more IFs than women. IFs were most commonly found in the abdominal/pelvic region followed by kidneys. Frequency of follow-up documentation was poor. The most common reported mechanisms of injury for patients included in the study were MVA and road traffic accidents (60.0%) followed by falls from >3m (23.2%). **Conclusion:** Although there is good documentation on the mechanism of injury, patient demographics, and type of IF, follow-up for IFs following acute trauma admission lacks documentation and follow-up and is an identified issue in patient management. There is great need for systematic protocols to address management of IFs in polytrauma patients.

Keywords: incidental findings, polytrauma, whole-body computed tomography

P015

Efficacy of the Brain Injury Guidelines for complicated mild traumatic brain injuries

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Introduction: The Brain Injury Guidelines (BIG) stratifies complicated mild traumatic brain injury (mTBI) patients into 3 groups to guide hospitalization, neurosurgical consultation and repeat head-CT. BIG-1 patients could be managed safely without neurosurgical consultation or transfer. Systematic transfer to neurotrauma centers provide few benefits to this subgroup leading to overtriage. Similarly, unnecessary clinical and radiological follow-ups utilize significant health-care resources. Objective: to validate the safety and efficacy of the BIG for complicated mTBIs. **Methods:** We performed a multicenter historical cohort study in 3 level-1 trauma centers in Quebec. Patients ≥ 16 years old assessed in the Emergency Department (ED) with complicated mTBI between 2014 and 2017 were included. Patients with penetrating trauma, cerebral aneurysm or tumor were excluded. Clinical, demographic and radiological data, BIG variables, TBI-related death and neurosurgical intervention were collected using a standardized form. A second reviewer assessed all ambiguous files. Descriptive statistics, over- and under-triage were calculated. **Results:** A total of 342 patients’ records were assessed. Mean age was $63 \pm 20,7$ and 236 (69 %) were male. Thirty-five

patients were classified under BIG-1 (10.2%), 110 under BIG-2 (32.2%) and 197 under BIG-3 (57.6%). Twenty-six patients (7%) required neurosurgical intervention, all were BIG-3. 90% of TBI-related deaths occurred in BIG-3 and none were classified BIG-1. Among the 192 transfers (51%), 14 were classified under BIG-1 (7.3%) and should not have been transferred according to the guidelines and 50 under BIG-2 (26%). In addition, 40% of BIG-1 received a repeat head computed tomography, although not indicated. Similarly, 7% of all patients had a neurosurgical consult even if not required. Projected implementation of BIG would lead to 47% of overtriage and 0.3% of undertriage. **Conclusion:** Our results suggest that the Brain Injury Guidelines could safely identify patients with negative outcomes and could lead to a safe and effective management of complicated mTBI. Applying these guidelines to our cohort could have resulted in significantly fewer repeat head CTs, neurosurgical consults and transfers to level 1 neurotrauma centers. **Keywords:** complicated mild traumatic brain injury, guidelines

P016

Feasibility of a nurse-led smoking cessation intervention in the emergency department

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Introduction: Cigarette smoking is a leading global cause of morbidity and mortality. Multiple studies internationally have established that cigarette smoking prevalence is higher in emergency department (ED) patients than their respective communities. Previously, we demonstrated the smoking prevalence among Saskatoon ED patients (19.6%) is significantly higher than the provincial average (15.1%), and over 50% of smoking patients would be receptive to ED-specific cessation support. The purpose of this project was to identify nurses' beliefs regarding smoking cessation in the ED, and barriers to implementing it in the department. **Methods:** A questionnaire was administered to all nurses employed at St. Paul's Hospital ED in Saskatoon assessing attitudes towards ED cessations, as well as the benefit and feasibility of three potential interventions: brief cessation counselling, referral to community support programs, and distributing educational resources. The questionnaire included Likert scale numerical ratings, and written responses for thematic analysis. The thematic analysis was performed by creating definitions of identified themes, followed by independent review of the data by researchers. **Results:** 83% of eligible nurses completed the survey (n=63). Based on Likert scores, ED nurses rarely attempt to provide cessation support, and would be minimally comfortable with personally providing this service. Barriers identified through thematic analysis included time constraints (68.3%), lack of patient readiness (19%), and lack of resources/follow-up (15.9%). Referral to community support programs was deemed most feasible and likely to be beneficial, while counselling within the ED was believed to be least feasible and beneficial. Overall, 93.3% of nurses indicated time and workload as barriers to providing ED cessation support during the survey. **Conclusion:** Although the ED is a critical location for providing cessation support, the proposed interventions were viewed as a low priority task outside the scope of the ED. Previous literature has demonstrated that multifaceted ED interventions using counselling, handouts, and referrals are more efficacious than a singular approach. While introduction of a referral program has some merit, having

professionals dedicated to ED cessation support would be most effective. At minimum, staff education regarding importance of providing smoking cessation therapy, and simple ways to incorporate smoking cessation counselling into routine nursing care could be beneficial.

Keywords: emergency nursing, primary prevention, smoking cessation

P017

Chart audit of patients with no fixed address presenting to the emergency department to identify areas to improve care

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Background: Homelessness is a growing Canada-wide concern. Those with no fixed address have increased rates of emergency department (ED) utilization and increased healthcare spending compared to the general population, with higher rates of acute and chronic illnesses, as well as all-cause mortality. EDs are uniquely situated to act as an access point to the network of available community services, however referral rates from the ED is uncertain. To date, there has been no data collected on London, Ontario's homeless population, their health burden, and their utilization patterns of the ED. **Aim Statement:** The primary objective of this study is to describe ED visits for adult patients with no fixed address in London, Ontario to assess for potential areas to improve care. **Measures & Design:** This is a retrospective chart review, of patients with no fixed address visiting London, Ontario Emergency Departments in 2018. ED visits were identified and pulled using either a diagnosis of "homeless", a lack of postal code, or a postal code for a known shelter. Cases included based on postal code were manually reviewed to determine whether the patient had a resident address with the same postal code. **Evaluation/Results:** From this search, 4,294 visits were identified for 1237 unique patients. The median visits per person was 1 (IQR 1-2), with 388 patients having 3 or more visits, and the max being 138 visits. The median age was 38 (IQR 28-52), with 73% male. Ground ambulance was used for 46% of visits. 28% of visits were CTAS 1&2 and 5% were CTAS 5. Police facilitated visits in 401 cases. Top 3 discharge diagnosis categories were mental health (19%), infection (18%), drug misuse (17%). **Discussion/Impact:** Several errors were identified with our search strategy suggesting the current system of capturing homelessness in the EPR is not accurate, leading to an underestimation of the problem and limiting our ability to describe this population. The Ministry of Health mandates homelessness be applied as a tertiary discharge diagnosis during coding of the patient visit if possible. However, use of this code is inconsistent leading to large-scale omission of visits and an underrepresentation of pediatric cases. Systemic steps should be taken to improve identification of these patients moving forward.

Keywords: homelessness, quality improvement and patient safety, resource utilization

P018

Journal club functions as a community of practice that safeguards quality assurance in the era of free open access medical education: a qualitative study

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Introduction: The ways in which Emergency Medicine (EM) physicians interact with the medical literature has been transformed with