

for misuse in our cohort: 5,600 pills. **Conclusion:** After an ED visit for acute pain a significant portion of opioids prescribed is unused and available for misuse. A large pragmatic study should be done to confirm that an opioid prescription strategy based on our results will limit unused opioid pills while maintaining pain relief.

**Keywords:** opioids

#### LO11

##### Opiate prescribing in Ontario emergency departments

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**Introduction:** Increased prescribing of high potency opioids has been associated with increasing opioid addiction and linked to serious adverse outcomes including misuse, diversion, overdose and death. Problems related to opioids are a major Canadian public health concern yet few data are available on prescribing in most Canadian provinces. The objective of this study was to describe opioid prescribing in Ontario EDs and patient harms associated with this practice. **Methods:** We conducted a population-based cohort study among Ontario residents aged 15-64 years who were eligible for public drug coverage between April 2008 and March 2012. Using administrative databases, we identified patients with no opioid use in the past 12 months who received a prescription opioid from an emergency or family physician. Patients were followed for 2 years following their index prescription. The primary outcome was hospital admission for opioid toxicity and secondary outcome was dose-escalation exceeding 200 mg morphine equivalents (MEQ). **Results:** Of the 77,270 unique patients included, 33,492 (43.3%) and 43,778 (56.7%) prescriptions were issued by emergency physician (EP) and family physicians (FP), respectively. FP patients were older (45.9 vs 41.2 yr, MSD 0.35), had fewer ED visits (0.9 vs 2.3, MSD 0.46), and more FP visits (11.5 vs 8.7 MSD 0.31) in the year prior to their index visit. For combination products, EPs were more likely to prescribe oxycodone compared to FPs (37.2% vs 16.7%,  $\Delta$  20.5, 95% CI: 19.9, 21.2). For single agent products, EPs were more likely to prescribe hydromorphone compared to FPs (44.5% vs 21.7%,  $\Delta$  22.8, 95% CI: 20.4, 25.2). FPs were more likely to prescribe codeine either as a combination or single agent formulation. EP prescriptions led to significantly more hospital admissions for opioid toxicity (0.5% vs 0.3%,  $\Delta$  0.2, 95% CI: 0.1, 0.3), while FP prescriptions more often resulted in dose escalation beyond 200 mg MEQs (0.1% vs 0.7%,  $\Delta$  0.6, 95% CI: 0.4, 0.7). **Conclusion:** A large percentage of opioid-naïve patients receive an initial opiate prescription in the ED, where the use of high potency opioids is much more common, with 1/200 of these patients subsequently hospitalized for opioid toxicity. Creation of a physician accessible provincial registry would be useful to monitor opioid prescribing and dispensing, inform clinical practice, and identify patients at high-risk who may benefit from early interventions.

**Keywords:** opioid, physician prescribing, toxicity

#### LO12

##### The utility of femoral nerve blocks in the emergency department; a national survey of practice

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**Introduction:** Approximately 30,000 hip fractures occur annually in Canada, and the incidence will increase with an aging population. Pain control remains a challenge with these patients, as many are elderly and prone to delirium. Regional anesthesia has shown to be very effective with minimal risks, but it is not clear how often emergency physicians

are using this technique to provide analgesia for patients with proximal hip fractures. This is the first Canada-wide survey to evaluate the use of regional anaesthesia in the emergency department for hip fractures. It also evaluates physician comfort level with performing these blocks, perceived educational needs in this area, and barriers to performing nerve blocks. **Methods:** A 13-question survey was sent to 1041 members of the Canadian Association of Emergency Physicians via email in January and February of 2016. Data was collected and analysed using an online collection program called "Survey Monkey". Ethics approval was obtained through the University of Manitoba Research Ethics Board. **Results:** 272 Emergency physicians and residents took part in the survey. The majority of respondents (75.9%) choose intravenous opioids as their first line of analgesia and only 7.6% use peripheral nerve blocks (PNB) as their first line choice for analgesia in hip fracture. In response to practitioner comfort with PNBs for hip fractures, most were not at all confident (45.0%) in their ability and many respondents have never performed a nerve block for a hip fracture (53.9%). The most commonly identified barriers to performing PNBs include lack of training, the time to perform the procedure and a lack of confidence. A larger percentage of respondents (34.2%), identified having had no training and no knowledge of how to perform PNBs for hip fractures. **Conclusion:** The vast majority of Canadian emergency physicians who took part in this survey do not utilize PNBs as a method of pain management for hip fractures. Over half have never performed one of these procedures and many have never received training in how to do so. Future efforts should focus on improving access to education, disseminating information regarding the effectiveness of PNB, and addressing logistical barriers in the ED.

**Keywords:** survey, regional anesthesia, emergency department

#### LO13

##### GridlockED: an emergency medicine game and teaching tool

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**Introduction/Innovation Concept:** In the controlled chaos of the emergency department (ED) it can be difficult for medical trainees similarly recognize that there is definite order to the chaos, and many may never truly appreciate its complexity. How should medical learners develop this skill? Didactic teaching cannot effectively portray the complexities of managing the ED. Much like education in cardiac arrest, trauma, and multi-casualty incident management, it is our belief that the management of patient flow through the ED is best learned through simulation. Thus, we developed GridlockED, a board game that requires players to work cooperatively to manage a simulated ED to win the game. **Methods:** GridlockED development took place over a six-month period during which iterative cycles of gameplay and redevelopment were used to optimize game mechanics and improve player engagement. The patient cases were created by medical students (PS, DT, JR) and subsequently reviewed for content validity by two attending emergency physicians (TC, AP). Input from attending emergency physicians, residents, medical students, and laypeople was integrated into the game through a Plan-Do-Study-Act (PDSA) model. **Curriculum, Tool, or Material:** Our game includes: 1) The game board; 2) Patient cards, which describe a patient, their level of acuity, and the tasks that must be completed in order to disposition the patient; 3) Event cards, which cause random positive or negative events to occur-much like random events occur in real life that change the dynamics of the ED; 4) Game Characters, which move around the board to denote where tasks are being completed; 5) A tracking sheet to follow how many tasks each character has performed in each turn; 6) A shift-time clock, which is