

outcome was the average reduction from baseline in abdominal pain and nausea (each measured on a 10-cm VAS) at 2 hours. While the original trial design allowed for crossover, the primary analysis used only the first treatment period since fewer than the prespecified threshold of 20% of subjects crossed over. **Results:** We enrolled 33 subjects, of whom 30 (16 men, 29+/-11 years old, using 1.5+/-0.9 g/day since age 19+/-2 years) were treated at least once (haloperidol 13, ondansetron 17). Haloperidol at either dose was superior to ondansetron (difference 2.3 cm [95%CI 0.6, 4.0];  $p = 0.01$ ), with similar improvements in both pain and nausea, as well as less rescue antiemetics (27% vs 61%;  $p = 0.04$ ), and shorter time to ED departure (3.1+/-1.7 vs 5.6+/-4.5 hours;  $p = 0.03$  Wilcoxon rank sum). There were two (haloperidol) vs six (ondansetron) return visits for ongoing nausea/vomiting, as well as two return visits for acute dystonia, both in the higher dose haloperidol group. **Conclusion:** Haloperidol is superior to ondansetron for the acute symptomatic treatment of patients with ongoing hyperemesis attributed to habitual cannabis use. The efficacy of this agent over ondansetron provides insight into the mechanism of this new disorder, now almost a daily diagnosis in many Canadian emergency departments.

**Keywords:** cannabis, cannabis hyperemesis syndrome, hyperemesis

#### LO70

##### Emergency department use and migration patterns of people experiencing homelessness

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**Introduction:** Understanding how homeless patients interact with healthcare systems can be challenging. The nature of the population is such that identifying and following these persons can be severely limited by data. Previous studies have used survey data which relies on self-reporting and selected samples such as those persons admitted to homeless shelters (Gray et al. 2011). Other studies have been able to leverage administrative data but only for selected local geographic areas (Somers et al. 2016, Tompkins et al 2003). It is possible that the current literature has not examined a large proportion of homeless persons and their healthcare use. This is concerning because this population can have higher associated medical costs and greater medical resource utilization especially with regards to psychiatric and emergency department (ED) resources (Tulloch et al. 2012, Forchuk et al, 2015). **Methods:** Administrative health data (2010 to 2017) is used to analyze ambulatory care records for homeless individuals in Ontario, Canada. Uniquely, we are able to use ED contacts as a way of identifying homeless migrations from region to region within Ontario. Using a network analysis we identify high impact ED nodes and discrete hospital networks where homeless patients congregate. We are also able to more fully characterize this population's demographics, health issues, and disposition from the ED. **Results:** We provide a more complete understanding of migration patterns for homeless individuals, across Ontario and their concomitant ED use and hospitalizations. The three most frequented regions in Ontario ( $n = 640,897$ ) were Toronto Central (35.96%), Hamilton Niagara Halimand Brant (8.9%) and Champlain (7.84%). In subsequent visits, the majority of patients presented to different EDs, however a subgroup who always presented to the same site was present. Over the 7 year period, migration between visits occurred most often between urban areas, and increased as a whole. **Conclusion:** The results of the study allow for the enhancement care coordination

for vulnerable populations and enhance the availability and delivery of services for sub-groups of homelessness whose care needs may differ based on migration patterns. Services can be coordinated between jurisdictions for homeless individuals, and appropriate referrals can be made across the health care system. Further evidence is provided for a novel method of mapping migration among the homeless and its associations and effects on ED use.

**Keywords:** data, homelessness, migration

#### LO71

##### The effect of boarding time in ED on length of stay for psychiatric patients

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**Introduction:** The Emergency Departments (ED) is a gateway to the health care system for many psychiatric patients. As a consequence of hospital administrative factors and overcrowding, admitted psychiatric patients are often boarded in the ED while waiting for an inpatient bed. There is currently a lack of evidence to quantify the effect that ED boarding has on psychiatric patients. The primary objective of this study is to determine whether a patient's length of stay is related to longer ED boarding time. **Methods:** This study is a retrospective cohort using data from an administrative source, which was obtained from patient records captured in the Sunrise Clinical Manager EMR used across Calgary, Alberta EDs from 2014-2018. A hierarchical Bayesian regression analysis was used to model the several patient-level and hospital-level factors. The mean and variance was defined by the exposure of interest, namely hours in the Emergency Department after admission to psychiatry unit expressed as a continuous variable. An interaction between this exposure and patient-level confounders was used to model the changing effect of a patient's severity in the ED on their boarding time. **Results:** The median boarding time for patients in our study was 6.6 hours (standard deviation 17.3), while the average was 13.6 hours. Patients who were boarded for greater than 6 hours more frequently required an anti-psychotic (37% vs 11%; SMD 0.651), sedative (52% vs 29%; SMD 0.483) or restraints (18% vs. 14%; SMD 0.102). In crude analysis there was no difference in median length of stay for patients that were boarding more than 6 hours compared to those boarded for less than 6 hours (8 days vs 9 days; SMD 0.012). The rate ratio for length of stay is 1.05 with 95% posterior interval 1.04 - 1.06 for each 24 hour increase in boarding time. This means that for each 1 day worth of boarding time, the length of stay (in days) increases 1.05 times (or 0.05 days/day boarding time). **Conclusion:** Boarding time is associated with a small but absolute increase in length of stay for psychiatric patients. Decreasing boarding time could have ripple effects for ED efficiency and overall patient outcomes.

**Keywords:** boarding time, length of stay, psychiatry

#### LO72

##### Spotting potential opportunities for teachable moments

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**Introduction:** With the transition of Emergency Medicine into competency based medical education (CBME), entrustable professional activities (EPAs) are used to evaluate residents on performed clinical duties. This study aimed to determine if implementing a case-based orientation, designed to increase recognition of available EPAs, into CBME orientation would help residents increase the number of