physical movement, handover, team communication, and other – did not change (50min49sec/shift pre vs 50min53sec/shift go live, p = 0.99). **Conclusion:** Implementation of Epic did not affect EP time with individual patients - there was no change in direct patient care or chart review. Documentation time increased and EP efficiency (patients seen per hr on shift) decreased after go live. Patient volumes cannot be adjusted in the ED therefore anticipating the EHR impact on EP workflow is critical for successful implementation. EDs may consider up staffing 20% during go live. Findings from this study can inform how to best support EDs nationally through transition to EHR.

Keywords: electronic health record, health informatics, time motion study

MP03

Clearing the air: A retrospective cohort study of cannabis-related harms in urban Alberta emergency departments following legalization

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Introduction: Non-medical cannabis recently became legal on October 18th, 2018 to Canadian adults. The impact of legalization on Emergency Departments (EDs) has been identified as a major concern. The study objective was to identify changes in cannabis-related ED visits and changes in co-existing diagnoses associated with cannabis-related ED visits pre- and post-legalization for the entire urban population of Alberta. Urban Alberta was defined as Calgary and Edmonton, inclusive of Sherwood Park and St. Albert given the proximity of some Edmontonians to their EDs) encompassing 12 adult EDs and 2 pediatric EDs. **Methods:** Retrospective data was collected from the National Ambulatory Care Reporting System, and from the HealthLink and the Alberta Poison and Drug Information Service (PADIS) public telehealth call databases. An interrupted time-series analysis was completed via segmented regression calculation in addition to incident rate and relative risk ratio calculation for the pre- and post-legalization periods to identify both differences among the entire urban Alberta population and differences among individuals presenting to the ED. Data was collected from October 1st, 2013 up to July 31st, 2019 for ED visits and was adjusted for natural population increase using quarterly reports from the Government of Alberta. **Results:** The sample included 11 770 pre-legalization cannabis-related visits, and 2962 post-legalization visits. Volumes of ED visits for cannabis-related harms were found to increase post-legalization within urban EDs (IRR 1.45, 95% CI 1.39, 1.51; absolute level change: 43.48 visits per month in urban Alberta, 95% CI 26.52, 60.43), and for PADIS calls (IRR 1.87, 95% CI 1.55, 2.37; absolute level change: 4.02 calls per month in Alberta, 95% CI 0.11, 7.94). The increase in visits to EDs equates to an increase of 2.72 visits per month, per ED. Lastly, increases were observed for cannabinoid hyperemesis (RR 1.23, 95% CI 1.10, 1.36), unintentional ingestion (RR 1.48, 95% CI 1.34, 1.62), and in individuals leaving the ED pre-treatment (RR 1.28, 95% CI 1.08, 1.49). Decreases were observed for coingestant use (RR 0.77, 95% CI 0.73, 0.81) and hospital admissions (RR 0.88, 95% CI 0.80, 0.96). **Conclusion:** Overall, national legalization of cannabis appears to be correlated with a small increase in cannabis-related ED visits and poison control calls. Post-legalization, fewer patients are being admitted, though cannabinoid hyperemesis appears to be on the rise.

Keywords: cannabis, legalization, policy

MP04

Predicting future ED needs – population trends may not be enough!

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Introduction: As the population of Canadian cities grows, public policy planners frequently base predictions of future demand on population trends. We aimed to discover the relationship between demographically defined ED visit rate (EDVR) trends in an academic ED with corresponding population trends in the catchment area. **Methods:** We used administrative data to conduct a retrospective cohort time series to analyze per capita EDVR trends based on CTAS, age, gender and housing status for the period 2006-2015. These were adjusted for population growth using age-gender standardized rates from 2011 census data. All EDVR and Standardized estimates were extrapolated for 100,000 population. **Results:** There were 646 731 visits during the study period, increasing by 25.6% from 56 757 in 2006 to 71 289 in 2015, with an annual incremental linear trend of 1893/year (CI:1593-2192). The highest CTAS2 EDVR increase, 521/year, (95%CI: 433-608) was by non-homeless patients older than 49. CTAS2 visits and the rate in all non-homeless patients increased by 335/year, (95% CI 280-391), while homeless patients less than 30 showed the highest CTAS2 EDVR annual rate incremease (1183/year, CI:1448-2218). From 2008-2015, the annual linear per capita CTAS5 EDVR declined by 121/year (CI:79-163). The population of adults in Halifax increased by1.2%/yr with a linear trend of 4149/year (CI:4012-4287). The highest linear increasing trend was for those older than 49 (2604/year CI:2494-2714), followed by 30-50-year old group (1223/year, CI:1138-1309) with the lowest trend for those aged less than 30 (322/year,CI:170-473). Standardized and non-standardized rate decline (CTAS5) and incline (CTAS2) were statistically similar and were not influenced by population changes. The population older than 49 increased by 38% over the 10 year period, whereas the CTAS2 visit change increased by 250%. If the CTAS2 EDVR trend continues, this rate in 2027 will double that of 2015, even if the population in the catchment area remains stable. **Conclusion:** EDVR trends show an increase in CTAS2 visits driven chiefly by older patients. This trend exceeds the trend suggested by Canadian Foundation for Healthcare Improvement and is significantly more than predicted by population demographic changes. Healthcare administrators will need to bear these disparities in mind as they prepare for future ED capabilities.

Keywords: emergency demands, population trends

MP05

Validation of the Canadian clinical practice guideline clinical decision aid for acute aortic syndrome

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Introduction: Acute aortic syndrome (AAS) is a rare clinical syndrome with a high mortality encompassing acute aortic dissection, intramural hematoma and penetrating atherosclerotic ulcer. Up to 38% of cases are misdiagnosed on first presentation. There is a large variation in use of computed tomography to rule out AAS. The Canadian clinical practice guideline for the diagnosis of AAS was developed in order to reduce the frequency of misdiagnoses. As part of the guideline, a clinical decision aid was developed to facilitate clinician decision-making based on practice recommendations. Our