the design of a freely available toolkit for provincial implementation by expert working groups, 5) design of 8 key QI metrics by a modified Delphi process, and 6) identification of process measures for QI data collection by implementation metrics. Evaluation/Results: PDSA1-2; 150-hospitals were surveyed. 33% of hospitals lacked MHPs, mostly in smaller sites. Major areas for QI were related to activation criteria, hemostatic agents, protocolized hypothermia management, variable MHP naming, QI metrics and serial blood work requirements. PDSA3; 3 Delphi rounds were held to reach 100% expert consensus for 42 statements and 8 CQI metrics. Major areas for modification were protocol name, laboratory resuscitation targets, cooler configurations, and role of factor VIIa. PDSA4; adaptable toolkit is under development by the steering committee and expert working groups. Implementation is scheduled for Spring 2020. PDSA5; the 8 CQI metrics are: TXA administration < 1 h, RBC transfusion < 15 min, call to transfer for definitive care < 60 min, temp >35°C at end of protocol, Hgb kept between 60-110g/L, transition to group-specific RBC by 90 min, appropriate activation defined by ≥6 units RBC in the first 24 hours, and any blood component wastage. Discussion/ Impact: MHP uptake, content, and tracking is variable. A standardized MHP that is adaptable to diverse settings decreases complexity, improves use of evidence-based practices, and provides a platform for continuous QI. PDSA6 will occur after implementation; we will complete an implementation survey, and design a pilot and feasibility study for prospective tracking of patient outcomes using existing prospectively collected inter-hospital and provincial databases.

Keywords: massive hemorrhage protocol, quality improvement and patient safety, resuscitation systems

LO₄₂

A systematic review of short-term use of therapeutic opioids for children and future opioid use disorders

S. Ali, MD CM, M. Afzalzada-Ahrari, BA, M. Dyson, PhD, D. DaRosa, K. Dong, MD, MSc, A. Drendel, MSc, DO, L. Hartling, PhD, University of Alberta, Edmonton, AB

Introduction: Despite an overall decline in opioid prescriptions in Canada, healthcare visits, hospitalizations, and deaths due to opioid-related harms continue to rise for children. Clinicians urgently require high quality synthesized evidence to inform personalized decisions regarding opioid use for children. The objective of this systematic review was to examine the association between short-term therapeutic exposure to opioids and development of opioid use disorder. Methods: A medical librarian conducted a comprehensive search of 10 databases from inception to May 2019. Two authors independently assessed studies for inclusion. Studies were eligible if they reported primary research in English or French, and study participants had short (<14 days) or non-specific duration of therapeutic exposure to opioids before age 18 years. Primary outcome was the development of an opioid use disorder; secondary outcomes included opioid addiction, dependence, misuse, and abuse. Data extraction involved two independent reviewers utilizing a standardized form. Methodological quality was assessed using the NIH tools for observational studies. Results are described narratively. Results: The search identified 4,072 unique citations; 82 were selected for review, and 17 were included (3 retrospective cohort, 4 prospective cohort, and 10 cross-sectional). All studies took place in the USA. A total of 1,562,503 participants were analyzed. Nine studies were administered in schools, 3 used administrative data. While most settings were non-specific, 1 study examined opioid use in dentistry, 1 in trauma, and 1 in organized sports. One comparative

study showed an association between short-term therapeutic use and opioid misuse. Two studies showed opioid related adverse events (e.g., overdose) among cohorts exposed to short-term use. The remaining 14 studies did not specify duration of exposure; therefore, confirming whether misuse was due to short-term therapeutic exposure was not possible. Conclusion: A small number of studies in this review suggest an association between short-term opioid use and opioid misuse; however, further analysis is underway with consideration of methodological limitations of the individual studies (final results pending). Careful consideration of the risk and benefits of short-term opioid use should be undertaken prior to prescribing opioids. PROSPERO Registration Number: 122681.

Keywords: narcotics, opioid misuse, opioid use disorder

LO43

First Nations emergency care visits in Alberta: Descriptive results of a retrospective cohort study

P. McLane, BA, PhD, MA, C. Barnabe, MD, MSc, B. Holroyd, MBA, MD, A. Colquhoun, MSc, PhD, L. Bill, BScN, K. Fitzpatrick, MSc, K. Rittenbach, PhD, C. Healy, BSc, H. Bull, M. Crawler, L. Firth, T. Jacobs, D. Twin, R. Rosychuk, MSc, PhD, University of Alberta, Edmonton, AB

Introduction: Emergency care serves as an important health resource for First Nations (FN) persons. Previous reporting shows that FN persons visit emergency departments at almost double the rate of non-FN persons. Working collaboratively with FN partners, academic researchers and health authority staff, the objective of this study is to investigate FN emergency care patient visit statistics in Alberta over a five year period. Methods: Through a populationbased retrospective cohort study for the period from April 1, 2012 to March 31, 2017, patient demographics and emergency care visit characteristics for status FN patients in Alberta were analyzed and compared to non-FN statistics. Frequencies and percentages (%) describe patients and visits by categorical variables (e.g., Canadian Triage Acuity Scale (CTAS)). Means and standard deviations (medians and interquartile ranges (IQR)) describe continuous variables (e.g., distances) as appropriate for the data distribution. These descriptions are repeated for the FN and non-FN populations, separately. Results: The data set contains 11,686,288 emergency facility visits by 3,024,491 unique persons. FN people make up 4.8% of unique patients and 9.4% of emergency care visits. FN persons live further from emergency facilities than their non-FN counterparts (FN median 6 km, IQR 1-24; vs. non-FN median 4 km, IQR 2-8). FN visits arrive more often by ground ambulance (15.3% vs. 10%). FN visits are more commonly triaged as less acute (59% CTAS levels 4 and 5, compared to non-FN 50.4%). More FN visits end in leaving without completing treatment (6.7% vs. 3.6%). FN visits are more often in the evening – 4:01pm to 12:00am (43.6% vs. 38.1%). Conclusion: In a collaborative validation session, FN Elders and health directors contextualized emergency care presentation in evenings and receiving less acute triage scores as related to difficulties accessing primary care. They explained presentation in evenings, arrival by ambulance, and leaving without completing treatment in terms of issues accessing transport to and from emergency facilities. Many factors interact to determine FN patients' emergency care visit characteristics and outcomes. Further research needs to separate the impact of FN identity from factors such as reasons for visiting emergency facilities, distance traveled to care, and the size of facility where care is provided.

Keywords: First Nations

S22 2020;22 S1 *CJEM* • *JCMU*