computerized order set changes as the cornerstone of an effective and rapid knowledge translation strategy to align physician practice with best evidence.
Keywords: computerized provider order entry, ketorolac, quality improvement and patient safety

MP32

Using physician practice reports and feedback sessions to reduce low value care in bronchiolitis

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Background: Despite strong evidence recommending supportive care as the mainstay of management for most infants with bronchiolitis, prior studies suggest that many of these patients receive low-value interventions. Providing clinicians with their practice reports and peer comparator data or an achievable benchmark of care (audit and feedback) has been shown to be an effective strategy to improve adherence to guidelines. **Aim Statement:** To decrease low-value care (use of any or all of chest radiographs, viral testing and salbutamol) in infants with bronchiolitis by delivering individual physician reports in addition to Group Facilitated Feedback Sessions (GFFS) to pediatric emergency physicians (PEPs). **Measures & Design:** Our cohort included 3,883 patients ≤12 months old that presented to two emergency departments with a diagnosis of bronchiolitis from April 1, 2013 to April 30, 2018. Using administrative data we captured baseline characteristics and interventions. Consenting PEPs received two audit and feedback (A&F) reports which included their individual and peer comparator data. Two multi-disciplinary GFFS (including inpatient pediatricians, nurse, learners and respiratory therapists) presented data and identified barriers and enablers of reducing low-value care. The primary outcome was the proportion of patients who received any low-value intervention, and was analyzed using statistical process control charts. Process measures (consent to obtain report, attendance and evaluations from the feedback session) and balancing measures were also captured. **Evaluation/Results:** 78% of PEPs consented to receive their A&F reports. Patient baseline characteristics were similar in the baseline (n = 3109) and intervention period (n = 774). Following the baseline physician reports and the GFFS, low-value care decreased from 42.6% to 27.1% (absolute difference: -15.5%; 95% confidence interval (CI): -19.8% to -11.2%) and 78.9% to 64.4% (absolute difference: -14.5%; 95% CI: -21.9% to -7.2%) in patients who were not admitted and admitted, respectively. Balancing measures such as ICU admission (absolute difference: -0.6%; 95%CI: -5.7% to 4.4%) and ED revisit within 72 hours (absolute difference: -0.1%; 95% CI: -3.1% to 3.0% non-admitted patients, 1.0%; 95% CI: -1.2% to 3.2% admitted patients) were unchanged. **Discussion/Impact:** The combination of audit and feedback and a GFFS significantly reduced low-value care for pediatric patients with bronchiolitis by PEP's.
Keywords: bronchiolitis, audit and feedback, quality improvement and patient safety

MP33

Provincial spread of buprenorphine/naloxone initiation in emergency departments for opioid agonist treatment: a quality improvement initiative

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Background: Since January 1, 2016 2358 people have died from opioid poisoning in Alberta. Buprenorphine/naloxone (bup/nal) is the recommended first line treatment for opioid use disorder (OUD) and this treatment can be initiated in emergency departments and urgent care centres (EDs). **Aim Statement:** This project aims to spread a quality improvement intervention to all 107 adult EDs in Alberta by March 31, 2020. The intervention supports clinicians to initiate bup/nal for eligible individuals and provide rapid referrals to OUD treatment clinics. **Measures & Design:** Local ED teams were identified (administrators, clinical nurse educators, physicians and, where available, pharmacists and social workers). Local teams were supported by a provincial project team (project manager, consultant, and five physician leads) through a multi-faceted implementation process using provincial order sets, clinician education products, and patient-facing information. We used administrative ED and pharmacy data to track the number of visits where bup/nal was given in ED, and whether discharged patients continued to fill any opioid agonist treatment (OAT) prescription 30 days after their index ED visit. OUD clinics reported the number of referrals received from EDs and the number attending their first appointment. Patient safety event reports were tracked to identify any unintended negative impacts. **Evaluation/Results:** We report data from May 15, 2018 (program start) to September 31, 2019. Forty-nine EDs (46% of 107) implemented the program and 22 (45% of 49) reported evaluation data. There were 5385 opioid-related visits to reporting ED sites after program adoption. Bup/nal was given during 832 ED visits (663 unique patients): 7 visits in the 1st quarter the program operated, 55 in the 2nd, 74 in the 3rd, 143 in the 4th, 294 in the 5th, and 255 in the 6th. Among 505 unique discharged patients with 30 day follow up data available 319 (63%) continued to fill any OAT prescription after receiving bup/nal in ED. 16 (70%) of 23 community clinics provided data. EDs referred patients to these clinics 440 times, and 236 referrals (54%) attended their first follow-up appointment. Available data may under-report program impact. 5 patient safety events have been reported, with no harm or minimal harm to the patient. **Discussion/Impact:** Results demonstrate effective spread and uptake of a standardized provincial ED based early medical intervention program for patients who live with OUD.
Keywords: opioid agonist treatment, opioids

MP34

Block that Hip! Improving rates of ultrasound-guided fascia iliaca compartment blocks for hip fracture analgesia in the emergency department: a quality improvement initiative

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Background: In patients with acute hip fracture, a fascia iliaca compartment block (FICB) has been shown to provide effective non-opioid analgesia, reduce the incidence of pneumonia, and potentially decrease the rate of delirium [1]. However, this procedure was infrequently used in the St. Michael's Hospital (SMH) emergency department (ED). **Aim Statement:** Our aim was to increase the proportion of patients with hip fracture receiving FICB in the ED to 50% in six months. **Measures & Design:** We completed two

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Plan-Do-Study-Act (PDSA) cycles, measuring rates of FICB before and after each cycle. The first was a departmental rounds presentation with information about the process and benefits of FICB, addressing barriers identified by surveying the group. The second cycle included a bundle of interventions comprising of an "instruction card" with the steps required to do the procedure, access to a video tutorial, and a list of experienced physicians willing to help less experienced providers perform FICB. **Evaluation/Results:** In the three months prior to the project, the rate of FICB in the ED was 12.5% (3/24). For the three months after the first PDSA cycle, the rate increased to 22.2% (8/36). Then, the second cycle was performed. In the following two months the rate further increased to 36.8% (7/19). **Discussion/Impact:** Despite the clear increase in FICB rate, these changes were not statistically significant ($p = 0.063$). Our methodology was shown to be safe and effective, and our model can be applied to other ED groups looking to increase their rates of FICB.

Keywords: acute hip fracture, fascia iliaca compartment block, quality improvement and patient safety

MP35

Targeting the opioid crisis by influencing opioid prescribing in the emergency department

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Background: Liberal prescribing of opioids is a major contributing factor to the opioid crisis. Patients who take opioids for >5 consecutive days are at greater risk of long-term use. Evidence shows that significantly more opioids are prescribed for emergency department (ED) patients with acute pain compared to amounts consumed. Guidelines recommend prescribing a 3-day supply or 10-15 tablets of opioids for patients with acute pain **Aim Statement:** By January 2020, >70% of opioid prescriptions from our ED will be for <15 tablets of morphine 5 mg equivalents. **Measures & Design:** Emergency physicians were educated on best practice of prescribing opioids for discharged patients. An electronic prescription writer was built for discharged ED patients with a pop-up reminder for quantities >15 tablets (indicating a recommended quantity of 10-15 tablets) and a pop-up reminder for quantities >30 tablets (indicating a maximum quantity of 30 tablets and recommended quantity). A feature was built to auto-populate a prescription for morphine 5 mg po q4h prn x 10 tablets to facilitate adherence to guidelines. Outcome Measure % opioid prescriptions for <15 tablets of morphine 5 mg equivalents Process Measure Amount of opioids prescribed for discharged ED patients, measured as morphine 5 mg equivalents Number of opioid prescriptions for >30 tablets of morphine 5 mg equivalents Balancing Measure Number of patients that return to ED within 7 days and receive a repeat opioid prescription. **Evaluation/Results:** Prior to implementation of the electronic prescription writer a sample audit revealed that 50% of opioid prescriptions were written for <15 tablets of morphine 5 mg equivalents. For the first three quarters of 2019, 62%, 61% and 69% of opioid prescriptions were written for <15 tablets of morphine 5 mg equivalents. Only two prescriptions during the study period were for >30 tablets of morphine 5 mg equivalents. An average number of 7 patients per quarter were given a repeat opioid prescription during a return ED visit. **Discussion/Impact:** We were successful in influencing emergency physicians to prescribe fewer opioids to discharged patients. This has the potential to avoid converting ED patients with acute pain into long-term opioid users and to avoid the diversion of unused opioid tablets.

Keywords: opioids, prescriptions, quality improvement and patient safety

MP36

Reducing utilization of unnecessary coagulation tests by emergency providers

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Background: Curbing unnecessary laboratory testing represents a significant opportunity for cost reduction in the Canadian health care system. A Choosing Wisely report cited a 31% decline in the number of tests ordered in a Canadian emergency department (ED) after implementation of recommendations. The international normalized ratio (INR) remains frequently ordered in emergency departments without an appropriate indication. **Aim Statement:** We aimed to reduce the number of INR tests completed in the St. Joseph's Healthcare Hamilton Emergency Department by 50% by April 30, 2019. **Measures & Design:** We conducted the study in an urban, academic ED employing the Epic electronic health record (EHR). We tailored interventions according to the Hierarchy of Effectiveness to address root causes revealed by analysis of our baseline ordering behaviour. Interventions included provider education around evidence-based ordering indications and removal of the INR from our "chest pain" bloodwork panel. Our outcome measure was the weekly number of INR tests completed per ED visit. Process measures included the proportion of INR tests ordered for inappropriate indications on monthly audits of 20 charts where an INR was completed. Balancing measures included average ED length of stay for patients receiving INR testing. **Evaluation/Results:** We collected outcome, process, and balancing measures through the EHR and analyzed this data using statistical process control charts. Over the nine-month study period, we decreased weekly INR tests from 248.4 to 115.0, a reduction of 56% which met criteria for special cause variation. This amounts to a cost savings of $43,008 per year. ED length of stay for patients receiving INR testing did not change significantly. **Discussion/Impact:** Our interventions were successful in realising our 50% target reduction in INR tests without an increase in ED length of stay from repeat venipuncture. This result is in keeping with similar efforts in other Canadian EDs. Our interventions could likely be spread to other settings where an INR is included as part of a "chest pain" panel. This may represent a substantial cost reduction opportunity on a national scale. Further work is needed in order to assess long term sustainability, which can be supported by employing high effectiveness mechanisms such as automation of optimal behaviour.

Keywords: choosing wisely, international normalized ratio, quality improvement and patient safety

MP37

Emergency department boarding of admitted oncology patients receiving chemotherapy

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Introduction: Emergency department (ED) boarding is associated with worse outcomes for critically ill patients. There have been mixed findings in other patient populations. The primary objective of this study was to examine predictors of prolonged ED boarding among cancer patients receiving chemotherapy who required hospital

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