

competency-based assessment required by the Royal College of Physicians & Surgeons of Canada's Competency by Design transition.

Keywords: simulation, objective structured clinical examination (OSCE), competency

P058

Improving patient safety and streamlining care at a community hospital through spread and scale of a trauma care bundle: a quality improvement pilot project

E. Hahn, BSc, R. Andres, BSc, T. de Kok, A. Brown, BSc, J. Doyle, MD; McMaster University, St. Catharines, ON

Introduction: Non-trauma centers (NTC) and community hospitals commonly deliver medical care during the "golden hour" of trauma, which has significant implications on the health outcomes of patients. The Niagara Health System (NHS) and its 3 community NTC hospitals provide trauma care to over 100 patients annually during this critical period. NTCs lack standardized resources commonly found in trauma centers. Checklists and bundles have been effective in streamlining process to ensure health care providers provide the right care, at the right time and address critical points during patient care. A trauma care bundle was designed and implemented in the NHS as a means to improve trauma care and patient outcomes. **Methods:** A quality improvement (QI) approach was used to design, implement and evaluate a trauma care bundle at one of the NHS's community hospitals. These interventions were adapted and modified for community trauma care purposes. We piloted the trauma care bundle using rapid cycle improvements, known as Plan-Do-Study-Act (PDSA) cycles. We assessed outcome and process measures through a chart audit of all trauma care patients in the NHS from July 2015-December 2015. A safety attitudes questionnaire (SAQ) was administered to health system staff who were involved in the pilot to assess balancing measures. **Results:** Improvements to the bundle and its implementation from 4 PDSA cycles resulted in increased utilization. This continuous monitoring of the bundle and ongoing, conscious efforts to improve the intervention were used to spread and scale across all 3 sites of the NHS. 30% of patients received the trauma care bundle during phase 1 of the pilot from July 1- October 31, 2015. We are presently analyzing preliminary data to understand how the trauma care bundle impacts health outcomes and process and will present a comparative analysis between patient groups. **Conclusion:** Trauma care bundles may foster safer and more efficient patient care in community hospitals where the golden hour of trauma often occurs. This community trauma care bundle shows promising results for streamlining the care process to ensure patients receive appropriate care during the golden hour. Spread and scale of this bundle across other community hospitals will likely yield similar improvements in patient care.

Keywords: quality improvement, patient safety, trauma

P059

"Rate and See" – a pilot evaluation of a short duration atrial fibrillation pathway linking the emergency department to specialty care

A. Kwan, MD, F. Halperin, MD, N. Gorman, L. Janicki, L. Halperin, BSc, D.R. Harris, MD, MHS; Department of Emergency Medicine, Kelowna General Hospital, Kelowna, BC

Introduction: Rapid atrial fibrillation (AF) and flutter remains a common cause of emergency department (ED) visits. Canadian guidelines recommend a rhythm control strategy for patients presenting to ED within 48 hours of arrhythmia onset or who are anticoagulated. However, up to 70% of patients spontaneously convert within 24 hours, mitigating the need for urgent cardioversion. Moreover, education, risk

stratification, appropriate anticoagulation, and follow-up may be challenging in the ED setting. Therefore, direct and rapid linkage to an AF clinic was proposed to address these gaps in care. **Methods:** A pilot evaluation of a "Short Duration AF Pathway" was performed at Kelowna General Hospital, B.C., from June 2014 to Feb 2015. This care pathway—consisting of a treatment algorithm, ED order set, and referral process—was applied to patients with AF \leq 48 hours or those who were anticoagulated. Patients received initial rate control medication in the ED and were referred for reassessment in a collaborative cardiologist/nurse practitioner AF clinic and seen within 24 hours. Data was collected prospectively; descriptive statistics are presented. **Results:** Twenty patients were enrolled during the pilot period. Mean age was 69 (SD = 10) years, 6/20 (30%) female, mean CHADS65 score 1.35 (SD = 1.1), with 15/20 (75%) CHADS65 \geq 1. On presentation, 4/20 (20%) were taking anticoagulants and 12/20 (60%) had an AF history. All 20 patients were assessed in the AF clinic within 24 hours of referral. Upon assessment in the AF clinic, 10/20 (50%) had spontaneously converted to sinus rhythm and 5/20 (25%) were electrically cardioverted at the first AF clinic visit. The remaining 5/20 (25%) of patients were reclassified as AF of uncertain duration; one was admitted to hospital, the other four had delayed electrical cardioversion. All patients received education related to AF. No adverse events or readmissions to the ED were reported and 100% of patients with CHADS 65 \geq 1 had received appropriate anticoagulation. **Conclusion:** A "Short Duration AF Pathway" is a viable alternate approach to immediate cardioversion within the ED. Potential advantages include avoiding unnecessary cardioversion, providing patient education, accessing timely specialty care, and initiating anticoagulation where appropriate.

Keywords: atrial fibrillation, atrial flutter, quality improvement

P060

Cannabinoid hyperemesis syndrome presentation to the emergency department: a two-year multi-centre retrospective study

J.M. Hernandez, MD, PhD, J. Paty, BHSc, I. Price, MD; McMaster University, Hamilton, ON

Introduction: Cannabinoid hyperemesis syndrome (CHS) is a paradoxical side effect of cannabis use. Patients with CHS often present multiple times to the Emergency Department (ED) with cyclical nausea, vomiting and abdominal pain, and are discharged with various misdiagnoses. CHS studies to date are limited to case series. We examined the epidemiology of CHS cases presenting to two major urban Tertiary Care Centre EDs. **Methods:** Using explicit variables, trained abstractors, and standardized abstraction forms, we abstracted data for all adults (18-55 years) with a presenting complaint of vomiting, and/or a discharge diagnosis of vomiting and/or cyclical vomiting, during a 2-year period. Inter-rater agreement was measured using a kappa statistic. **Results:** We identified 494 cases: mean age 31 years; 36% male; only 19.4% of charts specifically reported cannabis use. Among the regular cannabis users (>3 times per week), 43% had repeat ED visits for similar complaints. Interestingly, of these patients, 92% had bloodwork done in the ED, 92% received IV fluids, 89% received anti-emetics, 27% received opiates, 19% underwent imaging, 8% were admitted to hospital, and 8% were referred to the Gastroenterology service. Inter-rater reliability for data abstraction was kappa = 1. **Conclusion:** This study suggests CHS may be an overlooked diagnosis for nausea and vomiting, a factor which can possibly contribute to unnecessary investigations and treatment in the ED. Additionally, this indicates a lack of screening for CHS on ED history, especially in quantifying cannabis use and eliciting associated symptoms of CHS.