

for reflective practice and video recording was used for teamwork evaluation and process mapping. **Curriculum, Tool, or Material:** We conducted monthly, unannounced, multidisciplinary, high-fidelity ISS scenarios at a Canadian Level 1 trauma centre. The trauma team was activated by the usual notification process and care provided in the same manner as an actual trauma patient. A semi-structured debriefing followed each session with a focus on team performance and LST identification. Teamwork was measured using a previously validated tool, the Clinical Teamwork Scale. Findings were used to inform discussion at multidisciplinary trauma rounds as part of an iterative process of evaluation and implementation. **Conclusion:** This multidisciplinary ISS trauma training program offers a novel approach to team performance evaluation and LST identification. Using risk-informed scenarios combined with human factors analysis we are able identify knowledge and technical skill proficiency gaps, LSTs and integrate formative team assessment. An iterative process beginning with ISS followed by multidisciplinary rounds provides a robust framework for system-based changes to improve team performance and overall patient care.

**Keywords:** simulation, trauma, patient safety

#### LO104

**A collaborative approach to developing and delivering a multi-modal quality improvement and patient safety curriculum for emergency medicine residents**

A.H. Cheng, MD, MBA, L.B. Chartier, MDCM, MPH, S. Hawes, EMBA, S. Vaillancourt, MD, MPH, M. McGowan, MHK, K. Dainty, PhD; University of Toronto, Division of Emergency Medicine, Department of Medicine, Toronto, ON

**Introduction / Innovation Concept:** The 2015 CanMEDS framework requires all Canadian residency programs to increase their focus on Quality Improvement and Patient Safety (QIPS). A survey of the FRCPC Emergency Medicine Residency Program Directors in Canada (63% response rate, 8/13) found that 75% (6/8) of programs have QIPS curricula with 84% (5/6) in the form of didactic lectures and 67% (4/6) as resident participation in a local project. Lectures alone do not expose learners to the practicality of conducting a QIPS project, and local resident projects often do not expose learners to the complexities of organization-wide QI initiatives. Furthermore, QI initiatives require working in interdisciplinary teams. We therefore hypothesize that an effective QIPS curriculum will require multiple education methods delivered using a multi-disciplinary lens. **Methods:** A collaborative longitudinal QIPS curriculum for emergency medicine residents at the University of Toronto (UT) was developed using multiple educational methods by physicians and non-medical QI specialists. The curriculum addresses three levels of QIPS training: Knowledge (lectures in PGY1 and 2), practical skills at the local clinical microsystem level (QI project in PGY3), and practical skills at the organization level (problem solving using the case method in PGY5). **Curriculum, Tool, or Material:** The lectures are taught by physicians involved in local and organization-wide QI projects and by those in senior management. The PGY3 residents enrol in a co-learning curriculum developed by the Department of Medicine, where residents and faculty conduct a local QI project together. The PGY5 teaching cases were created with management consultants using material from a real hospital QIPS initiative. PGY5s are taught using the case method that places the learner in the role of the organization's manager who discusses the issues in class and proposes actions. Residents learn about the practicality of their recommendations by discussion with the management consultants, who disclose the case outcomes and review the lessons learned. **Conclusion:** A longitudinal QIPS curriculum for emergency medicine residents at UT was developed collaboratively. Multiple

teaching methods address all three levels of QIPS training. This curriculum represents a novel use of the case method to instruct QIPS project leadership and management outside of the business school setting. Discussions with management consultants provide a different perspective of the real-life challenges of conducting QIPS initiatives.

**Keywords:** innovations in EM education, quality improvement, case-based learning

## Moderated Posters Presentations

#### MP001

**Low acuity emergency department access: are other options available?**

J. MacKay, MD, P.R. Atkinson, MD, M. Howlett, MD, E. Palmer, MD, J. Fraser, BN, E. Vaillancourt; Dalhousie University, Integrated Family/Emergency Residency Program, Saint John, NB

**Introduction:** Patients with low-acuity (CTAS level IV and V) complaints often use the emergency department (ED) to access care. This has often been attributed to lack of a primary care (PC) provider. However, simply being registered with a primary care practitioner may not prevent low acuity ED presentation. There is some evidence that a lack of timely access to primary care may contribute to low acuity ED presentations. The Wait Time Alliance, a group of Canadian physicians and their respective professional associations, has recently set a benchmark of same day access to family doctors. It is unclear if this benchmark has been achieved in all jurisdictions. **Methods:** We performed linked cross sectional surveys to quantify the number of people presenting to a tertiary hospital ED (with 56,000 annual visits) with non-urgent problems who felt unable to access PC. PC practices were also surveyed to assess access using the metric of time to third next available appointment. Sample size calculations were completed. Descriptive statistics were reported.

**Results:** In the patient survey, 381 of 580 patients consented to participate. Of those, 89 patients met eligibility criteria. 32 (35.9%) reported that the wait to see their PC provider was "too long". 45 (50.5%) patients did not contact their PC office prior to ED presentation. 46 of 72 PC physician surveys were returned; a response rate of 63.8%. The mean time to third next available appointment in the region was 7.7 (95% CI 4.9-10.5) days (median 5 days, range 0-50 days). **Conclusion:** Fifty percent of low acuity patients did not attempt to access their PC provider prior to ED presentation. The benchmark of same day access to primary care has not been achieved in many practices in this region. Initiatives to promote primary care access would benefit both patients and providers.

**Keywords:** primary care, advanced access, patient acuity

#### MP002

**Beyond rater cognition: the impact of supervisor continuity on the quality of documented work-based assessments**

W. Cheung, MD, N. Dudek, MD, MEd, T.J. Wood, PhD, J.R. Frank, MD, MA(Ed); University of Ottawa, Ottawa, ON

**Introduction:** Barriers to completing high quality work-based assessments (WBAs) include relational factors such as the episodic and fragmented interaction that often exists between clinical supervisors and trainees. In an effort to increase supervisor-trainee continuity, the Department of Emergency Medicine at the University of Ottawa created Clinical Teaching Teams (CTT) in which a resident and clinical

supervisor work matched shifts together throughout the year. The aim of this study was to determine the impact of supervisor-trainee continuity on the quality of assessments documented on Daily Encounter Cards (DECs). **Methods:** DECs completed by 20 clinical supervisors were collected and sorted into three groups representing differing degrees of supervisor-trainee continuity (Group 1: CTT emergency resident; Group 2: non-CTT emergency resident; Group 3: non-CTT off-service resident). DECs were scored using the Completed Clinical Evaluation Report Rating (CCERR), a 9-item instrument that has been shown to have reliable ratings and the ability to discriminate the quality of completed DECs. Scores were analyzed using a univariate ANOVA with "mean CCERR score" as the dependent variable and "continuity group" and "supervisor" as between-subject variables. The relationship between CCERR scores and number of CTT encounters over time was examined using a repeated measures ANOVA with "encounter number" as the within-subject factor. **Results:** Mean CCERR scores for the CTT (21.0, SD = 5.8), non-CTT (21.9, SD = 4.2), and off-service (20.7, SD = 4.0) groups differed ( $p = 0.019$ ). A subsequent pairwise comparison demonstrated a statistically significant difference in means between the non-CTT and off-service groups ( $p = 0.04$ ); however, this 1.2 difference on the 45-point CCERR scale is unlikely to be of any educational significance. The number of repeated encounters did not have a statistically significant effect on CCERR scores ( $p = 0.43$ ) indicating that DEC quality did not improve with greater supervisor-trainee interaction. **Conclusion:** DEC quality as scored by the CCERR was low for all three groups. Increasing supervisor continuity alone did not result in higher quality assessments of clinical performance. Additional research focusing on the educational alliance that develops between supervisor and trainee may hold greater promise.

**Keywords:** daily encounter cards, assessment, supervisor continuity

#### MP003

##### AP or IP? Introduction of a new assessment of performance tool for point of care ultrasound

P.R. Atkinson, MD, D. Lewis, MBBS, J. Fraser, BN; Department of Emergency Medicine, Dalhousie University, Saint John Regional Hospital, Saint John, NB

**Introduction:** Organizations including CAEP, CEUS, the International Federation for Emergency Medicine (IFEM) and the Canadian Association of Radiologists have all called for defined competency assessments for point of care ultrasound (PoCUS). Definitions of core indications vary. The requirement for ongoing assessment of performance and skills maintenance is often overlooked. We describe the introduction an IFEM approved Assessment of Practice (AP) tool across a PoCUS training program and for continued assessment. **Methods:** We completed a cross sectional survey and cohort study including the entire body of emergency medicine physicians at a tertiary hospital. Over a 3 year period, all practitioners were assessed for CAEP position statement defined core applications at baseline and again after 2 years using a published PoCUS AP tool. We describe the tool, its application and the performance assessment findings. Emergency physicians (EP) underwent AP following formal training including an approved course and a logbook documenting a variable number of scans. **Results:** 23 EPs completed training and underwent AP initially, with all 23 EPs completing further assessment within 3 years. Assessment of practice was completed for 1. Focused Diagnostic Ultrasound Assessment for AAA, eFAST, cardiac, early pregnancy; and 2. Focused Procedural Ultrasound Guidance for venous catheterization. All EPs demonstrated initial and continuing competency in these PoCUS modalities. **Conclusion:** The IFEM PoCUS curriculum promotes ongoing local assessment of

performance. We successfully implemented this competency based approach and demonstrated feasibility, flexibility and utility in a Canadian emergency medicine program.

**Keywords:** point-of-care ultrasound (PoCUS), competency, quality assurance

#### MP004

##### Analgesia for acute gingivostomatitis: a national survey of pediatric emergency physicians

S. Ali, MDCM, J. MacLellan, MD, S.J. Curtis, MD, MSc, J. Baserman, MD, A. Dixon, MD; University of Alberta, Edmonton, AB

**Introduction:** Gingivostomatitis is a common, painful pediatric presentation, and yet, few studies are available to guide management. We aimed to describe pediatric emergency physicians' current practice patterns, with respect to analgesic use in children with acute gingivostomatitis. **Methods:** A national survey was conducted at all 15 national academic pediatric centres. Electronic surveys were distributed to pediatric emergency physicians using a modified Dillman protocol; non-respondents received paper surveys via post. Data were collected regarding demographics, clinical behaviour, knowledge, perceived barriers and factors that influence practice. **Results:** Overall response rate was 74% (150/202). Most physicians preferred the combination of acetaminophen and ibuprofen (72%) to either agent alone (ibuprofen 19%, acetaminophen 7%). The preferred second-line analgesics were oral morphine (48%, 72/150) and compounded topical formulas (42%, 64/150). The most commonly cited compounded agent was Benadryl plus Maalox (23%, 35/150). Clinical experience with a medication appeared to be the greatest influence on practice patterns; with 52% (78/149) 'strongly agreeing' that this was a factor. The most commonly cited barrier to adequate analgesia was difficulty in administration of topical or oral medication to children. **Conclusion:** As with many other painful conditions, acetaminophen and ibuprofen are reported to be used most frequently. However, oral morphine and topical compounded agents were also frequently prescribed. Regardless of patient age, physicians preferred oral morphine as a second-line agent to treat pain from severe gingivostomatitis. Future research should focus on determining which analgesic and route (oral or topical) is the most effective and best-tolerated choice.

**Keywords:** pediatric, analgesia, opioid

#### MP005

##### Treating and Reducing Anxiety and Pain PEDs (TRAPPED 2): time for action - a PERC project

E. D. Trottier, MD, S. Ali, MDCM, G. Meckler, MD, MSHS, M. Blachet, MD, A.S. Stang, MD, MBA, MSc, R. Porter, MD, S. Le May, PhD, A. Dubrovsky, MDCM, MSc, M. Chan, MD, R. Jain, MD, T. Principi, MD, MSc, G. Joubert, MD, A.J. Kam, MD, MScPH, J. Thull-Freedman, MD, MSc, G. Neto, MD, M. Lagacé, J. Gravel, MD, MSc; CHU Ste-Justine, Montréal, QC

**Introduction:** Multiple barriers to appropriate analgesia are reported in the paediatric emergency department (PED), including limited accessibility to effective strategies. **Our objective:** was to evaluate the improvement in the accessibility of pain and anxiety management strategies in Canadian PEDs, after the creation of a national pediatric pain Quality Improvement Collaborative (QIC), through Pediatric Emergency Research Canada (PERC). **Methods:** In 2013, the TRAPPED 1 survey was administered to Canadian PEDs, in order to evaluate what resources were in place for pain and anxiety management. A pain