

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: Multiples 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

QIC was then created to stimulate the implementation of new strategies, through information sharing between PEDs. In 2015, the TRAPPED 2 cross sectional survey was administered. Its focus was to evaluate the improvement in the accessibility of specific strategies reported by each centre, after participating in this QIC, and working to implement change within their own PEDs. **Results:** All 15/15 Canadian PEDs responded to the TRAPPED 1 survey in 2013 and 11 agreed to participate in the national pain QIC. In-person, phone meetings, follow up surveys and email communications were employed for information sharing. Strategies identified by the QIC to be newly introduced in individual centres were educational initiatives, distraction options, nurse-initiated protocols and intranasal (IN) medications. All 15 PEDs completed the TRAPPED 2 survey. Compared to 2013, an increased number of PEDs used face-based pain scales (14/15 vs 6/15) and behavioural scales (5/15 vs 1/15) for pain assessment in 2015. Use of reminder posters on pain management at triage increased from 4/15 to 6/15 PEDs. Availability of tablets for distraction increased from 4/15 to 10/15 PEDs. Nurse-initiated protocols for topical anesthetic and oral sucrose (for needle procedures) increased from 10/15 to 12/15 sites and from 12/15 to 14/15 sites respectively. Availability of IN medications increased; fentanyl from 9/15 to 14/15 sites and midazolam from 8/15 to 10/15 sites. Ten of the 11 PEDs involved in the QIC strategy reported the implementation of at least one of their own identified strategies. **Conclusion:** This study suggests that the use of a QIC may improve the introduction of new strategies to reduce pain and anxiety in EDs. QICs may also be helpful to other centres when introducing new strategies.

Keywords: pain management, quality improvement, pediatric emergency department collaboration

MP006

Review of clinical presentation and trajectory of patients with a diagnosis of primary brain tumour in a pediatric tertiary centre
J. Abou-Diab, MD, S. Gouin, MDCM, I. Bouhout, MD, MSc, A. Carret, MD; CHU Ste-Justine, Montréal, QC

Introduction: Recognition of life-threatening conditions, such as brain tumours, remains a challenge among pediatric patients. Few studies have described the implication of initial presentation, clinical evolution and healthcare system factors in diagnosis delay of brain tumours in children. We aimed to determine the clinical presentation patterns and health care trajectory of children with a diagnosis of primary brain tumour. **Methods:** A retrospective chart review in a pediatric university-affiliated hospital was conducted. Participants were all patients less than 18 years of age diagnosed with a brain tumour by neuroimaging between Jan 2003 and Dec 2014. Data were extracted from an institutional tumour registry and medical records. **Results:** From the registry, 288 patients were identified. The mean age at time of diagnosis was 7.44 ± 0.29 years. Most tumours were infra-tentorial (55%) and had astrocytic origin (29%). The majority (35%) had consulted only once prior to diagnosis, while 14% had consulted at least 4 times prior to diagnosis. The mean time between the onset of symptoms and diagnosis was 147 ± 19 days. The mean time between symptoms onset and first consultation was 84 ± 14 days. The most frequent symptoms and signs at onset and diagnosis were respectively: headache (44% vs 59%, $p < 0.01$), nausea and vomiting (31% vs 58%, $p < 0.01$) and abnormalities of gait (10% vs 32%, $p < 0.01$). 129 patients (45%) were diagnosed in an Emergency Department (ED). Symptoms and signs that differed significantly for those diagnosed in an ED were: headache (71% vs 42%, $p < 0.01$), nausea and vomiting (73% vs 32%, $p < 0.01$), lethargy (26% vs 9%, $p < 0.01$), weight loss (15% vs 3%, $p < 0.01$), irritability (9% vs 0%, $p < 0.01$) and endocrine abnormality (2% vs 8%,

$p = 0.02$). Clinical presentations of infants up to one year of age (14%) differed from other age groups. They presented mostly with growth abnormality (46%), macrocephaly (40%), irritability (40%), development abnormalities (18%) and sun-setting eyes sign (10%). **Conclusion:** In this large comprehensive cohort, we have found that the diagnosis of primary brain tumours is most frequently made in the ED. Different clinical presentations have been identified and varied between different settings of diagnosis and different age groups.

Keywords: brain tumours, pediatric

MP007

Constats de décès à distance et disponibilité des services préhospitalier d'urgence

M. Gauthier, MD, J. Lebon, PhD, A.B. Tanguay, MD, MSc, F. Bégin, MD; Université Laval, Québec, QC

Introduction: L'Unité de coordination clinique des services pré-hospitaliers d'urgence (UCCSPU) est un plateau clinique rattaché au CSSS Alphonse-Desjardins (CHAU Hôtel-Dieu de Lévis) qui permet un soutien médical à distance des patients transportés par ambulance dans la région de Chaudières-Appalaches (CA). En 2011, un projet novateur, devenu programme par la suite, a été instauré afin de réaliser des constats de décès à distance (CDD). Le but du programme est de réduire le nombre de transport de patients décédés vers les hôpitaux afin de remettre rapidement en service l'équipe ambulancière. Le but de l'étude est de décrire et comparer le taux de CDD et le gain de temps sur la remise en service de l'équipe ambulancière avant et après l'implantation du programme de CDD dans deux différentes régions géographiques (Chaudières-Appalaches et Saguenay-Lac-St-Jean (SLSJ)). Par la suite, déterminer s'il existe une distance minimale à partir de laquelle ce gain de temps est nul pour chaque région. **Methods:** Il s'agit d'une étude rétrospective portant sur 204 personnes réparties en 4 groupes : 2 groupes témoins [CA pré-CDD (50) et SLSJ pré-CDD (50)] et 2 groupes d'étude [CA post-CDD (52) et SLSJ post-CDD (52)] pour les deux régions. Le pourcentage de CDD réussi (taux de réalisation) par région et les gains de temps entre chaque groupe (intra- et inter-région) en fonction de la distance avec le centre hospitalier (CH) ont été calculés. **Results:** Pour un même nombre de patients, le taux de réalisation de CDD est similaire entre les deux régions [CA = 80% (6 mois) et SLSJ = 76% (4 mois)]. Le temps de remise en service des ambulances est différent ($p < 0.05$) inter-région se caractérisant par des gains de temps moyens de 62 min (CA) et 28 min (SLSJ). Enfin, la distance minimale où le gain de temps est nul est de moins de 5 km pour chaque région. **Conclusion:** L'implantation du programme de CDD permet un gain de temps favorisant un retour plus rapide des services pré-hospitalier d'urgence si la distance entre le lieu du CDD et du CH est supérieure à 5 km. De plus, le gain en temps est proportionnel avec la distance entre le lieu du CDD et le CH.

Keywords: emergency medical services (EMS), ambulance services, prehospital

MP008

Quick to be seen; quick to come back: does first visit CTAS-category predict admission for unplanned returns?

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

Introduction: The percentage of unplanned return visits (URV) to the Emergency Department (ED) within 48 or 72 hours of discharge that result in an admission to hospital has been recommended as the top