

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

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**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  $7.44 \pm 0.29$  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  $147 \pm 19$  days. The mean time between symptoms onset and first consultation was  $84 \pm 14$  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

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**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?

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**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