

used and evaluated when implementing a communication tool or passport type document in the emergency department setting. **Methods:** This review was conducted following Joanna Briggs Institute methodology. Iterative steps included identifying the research question, identifying relevant studies, data extraction and synthesis. Keywords and indexed terms were used to search PubMed, Cinahl, Embase and Web of Science. The reference list of all identified reports and articles from that search were reviewed for additional studies and a hand search of the last 5 years of *Annals of Emergency Medicine* and the *Canadian Journal of Emergency Medicine* was completed. Inclusion criteria were set to select studies investigating either patients, caregivers or health care providers use of passports, communication documents or journals with the goal of improving any aspect of communication in the emergency department setting. **Results:** Of the 81 potential publications screened, only 4 met inclusion criteria for extraction. 1 reviewed a passport that aimed at pediatric pain management in settings that include the emergency department, 2 of the publications reported on the same project which developed a passport for asthma patients and 1 discussed a passport for patients with learning disabilities. All the included publications were published in and discuss passports that were developed for use in the UK. Descriptions of implementation, evaluation and perception of the passports in these publications was limited. **Conclusion:** This scoping review has revealed a major gap in the current literature on communication tools in the emergency department, a department where communication, especially about discharge is of utmost importance. The included studies focused on very different patient populations and aim to improve different outcomes and therefore don't allow us to make for passports aimed at helping the general emergency department population.

**Keywords:** communication, passport, discharge communication

#### P007

##### **Safety and effectiveness of a care protocol to treat migraine with Propofol in the emergency department**

S. Berthelot, MD, MSc, S. Baril, M. Mallet, MA, S. Côté, MD, PhD, Département de médecine familiale et de médecine d'urgence de l'Université Laval, Quebec, QC

**Introduction:** An evidence-based care protocol to treat migraine with low-dose Propofol was implemented in May 2014 at the emergency department (ED) of the CHUL (Québec city). Given potential side effects of Propofol, we aimed to evaluate the safety and effectiveness of this protocol. **Methods:** We reviewed charts of all patients aged 16 years and older who received Propofol between May 2014 and August 2017 for a migraine headache with or without aura, as defined in the International Headache Society Classification. The care protocol consisted of: 1) administration of intra-venous Propofol 20 mg each 5 to 10 minutes as needed (maximum of 6 doses); 2) sets of vital signs before and after each dose; and 3) continuous cardiac and saturation monitoring. Our primary outcome measures were the incidence (95% CI) of the following side effects: low arterial pressure (<90 systolic or <65 mean), desaturation (SaO<sub>2</sub> <92%), excessive sedation (scores 3 or 4 on the Pasero scale), and any arrhythmia. We also compared the mean reduction (95% CI) of pain pre- and post-treatment (visual analog scale VAS 0-10) and the proportion (95% CI) of rescue medication among patients who received Propofol as first-line medication to a matched cohort of patients who had Metoclopramide first. The two cohorts were paired for gender, age, triage priority, and month/year of ED visit. **Results:** Over the 3-year study period, 45 patients with migraine received Propofol through the care protocol, either as a first-line or a rescue therapy. In this cohort, hypotension, bradycardia

(<60/min) and desaturation occurred in 17.8% (8.0-32.1), 13.3% (5.1-26.8) and 6.7% (1.4-18.3) of cases respectively; no excessive sedation was reported. An intervention was undertaken in 4 cases [8.9% (2.5-21.2) 3 iv fluid bolus, 1 supplemental oxygen] to palliate the side effects of Propofol. A statistically significant mean reduction of 3.6 points (2.8-4.4) on the VAS scale was observed in patients treated with Propofol as first-line therapy (n=35). However, patients managed with first-line Metoclopramide (n=100) experienced a significantly higher mean reduction of their VAS score [5.3 (4.6-6.0)] than the Propofol group (p=0.003). The proportion of patients requiring the use of rescue medication was higher among patients first treated with Propofol [77.1% (63.2-91.1) vs. 29.0% (20.1-37.9); p<0.001]. **Conclusion:** Our care protocol to treat migraine with low doses of Propofol appears to be safe and to cause very few side effects prompting corrective interventions. Continuous (as opposed to intermittent) heart and saturation monitoring is probably not indicated. Given the effectiveness of Propofol compared to Metoclopramide, our care protocol will be used as a second-line therapy.

**Keywords:** quality improvement and safety, migraine, Propofol

#### P008

##### **Hereditary Angioedema Rapid Triage Tool (HAE-RT): translating clinical research into clinical practice**

S. Betschel, HBSc, MD, E. Avilla, S. Waserman, MD, J. Badiou, K. Binkley, MD, R. Borici-Mazi, MD, J. Hebert, MD, L. Howlett, A. Kanani, MD, P. Keith, MD, G. Lacuesta, MD, W. Yang, MD, A. Rowe, P. Waite, Department of Internal Medicine, University of Toronto Division of Clinical Immunology and Allergy St. Michael's Hospital, Toronto, ON

**Introduction:** Hereditary angioedema (HAE) patients (both diagnosed and undiagnosed) commonly present to the emergency department (ED). Presenting symptoms (swelling and pain) may be erroneously attributed to common allergic and gastrointestinal conditions resulting in major delays in diagnosis and appropriate treatment. No published tools currently exist for HAE screening and management in undiagnosed disease. The overall goal of the study was to develop a HAE-RT tool for ED settings. **Methods:** A two-phase mixed methods approach was used to develop the HAE-RT Tool including: Phase 1: A Delphi Study [HAE specialists (N=9) and National Patient Advocacy Group Members (N=3)] was conducted to reach consensus (80% agreement) on predictor variables to include. Phase 2: A retrospective chart review was conducted to assess the predictive findings of the predictor variables. A convenient sample of patients presenting with angioedema (with and without HAE) between January 2012 January 2017 were included in the study. **Results:** Of the 12 experts invited, 9 (75%) participated in the Delphi study. Of 8 HAE-specific predictive variables, 4 reached consensus including: (1) recurrent angioedema; (2) absence of urticaria; (3) past recurrent abdominal pain/swelling; (4) response to allergic therapy. The retrospective study included 85 patients (N=46 with HAE; N=39 non-HAE; overall 72% female). HAE patients were significantly more likely to have a family history of HAE (72% vs. 0%; P<0.0001); previous recurrent angioedema (96%; P<0.009); present with no hives (91%; P<0.036); previous recurrent abdominal pain (80%; P<0.0001); and only 2% responded positively to allergy treatments (P<0.0001). **Conclusion:** Our study emphasizes the importance of key stakeholder involvement and feedback to facilitate the prioritization of important information that must be included in the design of an HAE-RT tool. The next step is to observe the effect of the HAE-RT tool on patient triage in the ED.

**Keywords:** hereditary angioedema, clinical decision support tools, triage