

ambulance were 10.2 x higher for patients admitted to the ICU (OR = 10.2, 95%CI: 7.9 to 13.3) vs. those discharged home. The odds of arriving by ambulance was 64.2 x (OR = 64.2, 95% CI: 48.6 to 84.7) higher for patients CTAS 1 patients vs. CTAS 5 patients. The top 3 complaints among ambulance patients were respiratory (22.7%), orthopedic (14.7%), and general/minor (10.3%). Among self-presenting patients, the top three were general/minor (22.5%), respiratory (18.0%), and gastrointestinal (15.7%). **Conclusion:** Children presenting to the ED via ambulance are at higher risk for admission to the ward and critical care unit. It is important that EMS staff responsible for transporting children be well trained in managing critically ill children. Given the low proportion of pediatric transports, consideration must be given to how best to train EMS services in managing these children.

**Keywords:** emergency medical services, paediatrics, prehospital

#### P017

##### **Impact of the use of a checklist for transcutaneous cardiac pacing on competency of junior residents undergoing an advanced cardiac life support course**

K. Chabot, MD, J. Morris, MD, MSc, R. Perron, C. Ranger, MD, M. Paradis, MD, P. Drolet, MD, J. Cliche, MD, L. Londei-Leduc, MD, A. Robitaille, MD, Université de Montréal, Montreal, QC

**Introduction:** Transcutaneous cardiac pacing (TCP) is recommended for the treatment of symptomatic bradycardia, a life-threatening condition. Although TCP is taught in ACLS (advanced cardiac life support) courses, it is a difficult skill to master for junior residents. The main objective of this study is to measure the impact of having access to a checklist on successful TCP implementation. Our hypothesis was that the availability of a CL would improve performance of junior residents in the management of symptomatic bradycardia by facilitating TCP. **Methods:** We conducted a prospective, randomized, single-site study. First-year residents entering post-graduate programs and taking a mandatory ACLS course were enrolled. Students had didactic sessions on the management of symptomatic bradycardia followed by hands-on teaching on a low-fidelity manikin (ALS® simulator, Laerdal) using a CL conceived for this project as a teaching tool. Study participants were then assessed with a simulation scenario requiring TCP. Participants were randomly assigned to groups with and without CL accessibility. Performances were graded on six critical tasks. The primary outcome was the successful use of TCP, defined as having completed all tasks. Participants then completed a post-test questionnaire. Sample size estimation was based on a previous project (Ranger et al., 2018). Accepting an alpha error of 0.05 and a power of 80%, 45 participants in each group would permit the detection of 26.5% in performance gain. **Results:** Of 250 residents completing the ACLS course in 2017, 85 voluntary participants were randomized to a control group (no CL available during testing, n = 42) or an experimental group (CL available during testing, n = 43). Six participants in the experimental group adequately used TCP compared to five participants in the control group (p = 0.81, chi-squared test). Out of the 43 participants who had access to the CL, only 2 (5%) used it. Reasons why the CL was infrequently used were stated as the following: 24 participants (56%) mentioned not realizing it was available, 8 (19%) considered it was of little to no utility and 5 (19%) forgot a CL existed. **Conclusion:** Availability of a checklist previously used during simulation teaching did not increase junior residents' capacity to correctly apply TCP. Non-recognition of CL availability and decreased

perceived need for it were the main reasons for marginal use. Our results suggest that there are many limiting factors to CL effectiveness.

**Keywords:** bradycardia, checklist, simulation

#### P018

##### **How to get your departmental web content to work for you: one department's experience with free open access medical education**

K. Chandra, BSc, MD, D. Lewis, MBChB, BS, P. Atkinson, MBChB, MA, Dalhousie University, Saint John, NB

**Innovation Concept:** Free open access medical education (FOAM) is a quickly growing field. While there is an abundance of resources online, and on social media, the quality of those resources should always be questioned and reviewed. Furthermore, as medical learners progress in their training, they become lead consumers and producers of FOAM. Our educational innovation concept was the introduction of two FOAM streams into our residency program to assist learners to produce their own content with mentorship from our emergency medicine faculty. **Methods:** Medical students and residents training in the emergency department were encouraged to submit content to either our department website in the form of a clinical PEARL, or a research paper to the departmental Cureus online journal. All website content was reviewed by an attending physician and all Cureus content was submitted for further peer review and publication if approved. All published content was shared on social media through our department's Twitter account. A select number of residents were also mentored in reviewing and editing FOAM content and publishing it to our departmental website. **Curriculum, Tool or Material:** sjrhem.ca is the Saint John Regional Hospital Department of Emergency Medicine's website. A portion of the website is dedicated to posts arising from departmental rounds, case reviews as well as posts from learners in the form of clinical PEARLS. They are designed as succinct and informative clinical summaries and allow learners to share their content to a wider audience online. Cureus.com is an online journal of medical science, with a dedicated Dalhousie Emergency Medicine Channel. The editors are local emergency medicine faculty and senior residents, while reviewers are independent. In the last year, the clinical pearls received 5672 views, and the Cureus channel received 1143 content views. **Conclusion:** Feedback from learners regarding publication of their own FOAM has been positive and has allowed them to share their content to a much wider audience through our Departmental Website, Cureus Channel and Twitter stream. Furthermore, we are helping to prepare residents to produce their own high quality content, allowing our FOAM program to grow.

**Keywords:** free open access medical education (FOAM), innovations in EM education

#### P019

##### **Examining non-suicidal self injury at a Canadian pediatric emergency department**

J. Cherry, MD, MSc, K. Hurley, MD, MHI, D. Lovas, MD, A. LeBouthillier, BScN, N. Williams, K. Kennedy, E. Fitzpatrick, BSc, MN, IWK Health Centre/Dalhousie University, Halifax, NS

**Introduction:** Adolescents who present to emergency departments (ED) following intentional injuries present a challenge in terms of ascertaining their intent and risk for future self-injurious or suicidal behaviour. Our ED has seen an 80% increase in visits for mental