

(MCQE) and an annual Objective Structured Clinical Exam (OSCE) assessing competency in a broad range of clinical scenarios commonly addressed in EM. The 40-question MCQE is administered quarterly and a mix of old and new questions are used to ensure consistency. The OSCE is administered annually and relies on the same principal to remain consistent. OSCE scores are binary: pass or fail. We reviewed MCQE and OSCE scores from three consecutive cohorts of students. Students were pooled into two groups, tertiary and community, based on the site of their EM rotation. Mean MCQE and OSCE performance were compared between the two groups of students using two-tailed unpaired T tests. Chi squared tests were used to identify significant differences in scores between cohorts. **Results:** MCQE and OSCE scores from 312 students over three consecutive cohorts were analyzed. Cohorts included 104, 100, and 108 students with 61% trained in tertiary centres (N = 191). Students trained in tertiary centres had a mean MCQE score of 77%. Students from community centres had a mean score of 78%. There was no significant difference in MCQE scores between tertiary- and community-trained students ( $p = 0.6099$ ). The OSCE pass rate was 97% for students trained in tertiary centres and 98% for students trained in community centres. OSCE pass rates were not significantly different between the two groups ( $p = 0.8145$ ). **Conclusion:** Despite student perceptions that training in tertiary care EM centres was superior, objective analysis showed that academic and clinical performance were similar regardless of training site.

**Keywords:** clinical clerk, emergency medicine, performance evaluation

#### P111

##### Introduction of an ECPR protocol to paramedics in Atlantic Canada; a pilot knowledge translation project

C. Rouse, MD, J. Mekwan, MBChB, P. Atkinson, MBChB, MA, J. Fraser, BN, J. Gould, MD, D. Rollo, MD, J. Middleton, MD, T. Pishé, MD, M. Howlett, MD, J. Legare, MD, S. Chanyi, BSc, M. Tutschka, MD, A. Hassan, MD, S. Lutchmedial, MD, Dalhousie University, Saint John, NB

**Introduction:** There is currently no protocol for the initiation of extra corporeal cardiopulmonary resuscitation (ECPR) in out of hospital cardiac arrest (OHCA) in Atlantic Canada. Advanced care paramedics (ACPs) perform advanced cardiac life support in the pre-hospital setting often completing the entire resuscitation on-scene. Implementation of ECPR will present a novel intervention that is only available at the receiving hospital, altering how ACPs manage selected patients. Our objective is to determine if an educational program can improve paramedic identification of ECPR candidates. **Methods:** An educational program was delivered to paramedics including a short seminar and pocket card coupled with simulations of OHCA cases. A before and after study design using a case-based survey was employed. Paramedics were scored on their ability to correctly identify OHCA patients who met the inclusion criteria for our ECPR protocol. Scores before and after the education delivery were compared using a two tailed t-test. A 6-month follow-up is planned to assess knowledge retention. Qualitative data was also collected from paramedics during simulation to help identify potential barriers to implementation of our protocol in the prehospital setting. **Results:** Nine advanced care paramedics participated in our educational program. Mean score pre-education was 9.7/16 (61.1%) compared to

14/16 (87.5%) after education delivery. The mean difference between groups was 4.22 (CI = 2.65-5.80,  $p = 0.0003$ ). There was a significant improvement in the paramedics' ability to correctly identify ECPR candidates after completing our educational program. **Conclusion:** Paramedic training through a didactic session coupled with a pocket card and simulation appears to be a feasible method of knowledge translation. 6-month retention data will help ensure knowledge retention is achieved. If successful, this pilot will be expanded to train all paramedics in our prehospital system as we seek to implement an ECPR protocol at our centre.

**Keywords:** cardiac arrest, education research, simulation

#### P112

##### In situ simulation: A team sport?

D. Rusiecki, BSc, S. Hoffe, MD, M. Walker, PhD, J. Reid, BN, N. Rocca, MD, MSc, H. White, MD, L. McDonough, BN, T. Chaplin, MD, Queen's University, Kingston, ON

**Introduction:** Identification of latent safety threats (LSTs) in the emergency department is an important aspect of quality improvement that can lead to improved patient care. In situ simulation (ISS) takes place in the real clinical environment and multidisciplinary teams can participate in diverse high acuity scenarios to identify LSTs. The purpose of this study is to examine the influence that the profession of the participant (i.e. physician, registered nurse, or respiratory therapist) has on the identification of LSTs during ISS. **Methods:** Six resuscitation- based adult and pediatric simulated scenarios were developed and delivered to multidisciplinary teams in the Kingston General Hospital ED. Each ISS session consisted of a 10- minute scenario, followed by 3-minutes of individual survey completion and a 7- minute group debrief led by ISS facilitators. An objective assessor recorded LSTs identified during each debrief. Surveys were completed prior to debrief to reduce response bias. Data was collected on participant demographics and perceived LSTs classified in the following categories: medication; equipment; resources and staffing; teamwork and communication; or other. Two reviewers evaluated survey responses and debrief notes to formulate a list of unique LSTs across scenarios and professions. The overall number and type of LSTs from surveys was identified and stratified by health care provider. **Results:** Thirteen ISS sessions were conducted with a total of 59 participants. Thirty- four unique LSTs (8 medication, 15 equipment, 5 resource, 4 communication, and 2 miscellaneous issues) were identified from surveys and debrief notes. Overall, MDs ( $n = 12$ ) reported 19 LSTs ( $n = 41$ ) reported 77 LSTs, and RTs ( $n = 6$ ) reported 4 LSTs based on individual survey data. The most commonly identified category of LSTs reported by MDs (36.8%) and RTs (75%) was equipment issues while RNs most commonly identified medication issues (36.4%). Participants with  $\leq 5$  years of experience in their profession, on average identified more LSTs in surveys than participants with  $>5$  years experience (1.9 LSTs vs 1.5 LSTs respectively). **Conclusion:** Nursing staff identified the highest number of LSTs across all categories. There was fairly unanimous identification of major LSTs across professions, however each profession did identify unique perspectives on LSTs in survey responses. ISS programs with the purpose of LST identification would benefit from multidisciplinary participation.

**Keywords:** in situ simulation, latent safety threats, patient safety