LO095
Developing and implementing an interprofessional in-situ simulation program in an academic, tertiary-care emergency department: barriers, successes and the Ottawa Hospital experience
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Introduction / Innovation Concept: During Emergency Department (ED) resuscitation of critically ill patients, effective teamwork and communication among various healthcare professionals is essential to ensure favorable patient outcomes and to minimize threats to patient safety. However, numerous individual and system factors create barriers to effective team functioning. Simulation center-based training has been used to improve Crisis Resource Management skills among physician and nursing trainees, but in-situ simulation is a relatively new concept in adult Emergency Medicine in North America. Methods: To enhance patient care and team effectiveness, an ED nursing and physician group was created to develop and implement a novel interprofessional in-situ simulation program in two Canadian, academic tertiary-care emergency departments. Departmental approval and financial support was obtained and sessions commenced in January 2015. Curriculum, Tool, or Material: Monthly high-fidelity simulation sessions are held in the ED resuscitation rooms at both campuses of our hospital. Each session is facilitated and debriefed by simulation-trained Emergency Medicine faculty and senior residents, a nurse educator and a research assistant. Technical support is provided by our simulation center staff. Participants are recruited from the physicians, residents, nurses, respiratory therapists and other support staff working in the ED. To minimize the impact on patient care, two additional nurses are scheduled to cover nursing assignments on “sim days”. Simulations are limited to fifteen minutes, followed by a twenty minute debriefing. Conclusion: We have successfully developed and implemented an interprofessional in-situ simulation program in our ED. Participant feedback has been overwhelmingly positive. Lack of financial support, reluctance of staff to participate, and overwhelmed resources are some of the challenges to running a program like this in a busy ED environment. However, there are clear benefits: empowering team members, culture change, identification of latent safety threats, and a perception of improved teamwork and communication. Keywords: innovations in EM education, in-situ simulation, interprofessional education

LO096
Comfortable with your thoracotomy skills? An innovative simulation-based curriculum to teach rare procedures in emergency medicine
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Introduction / Innovation Concept: Emergency medicine (EM) residents must demonstrate proficiency in several rare, life-saving procedures but few clinical opportunities exist to practice and master these skills. Currently no standardized curricula exist for the instruction of these skills during EM residency. Accordingly, many residents graduate without the experience to perform these critical procedures confidently. We developed a novel, simulation-based curriculum for six rare, life-saving, EM skills that integrates deliberate practice and Kolb’s theory of experiential education. Methods: We used existing EM training objectives and a recent national resident needs assessment to develop a simulation-based technical skills curriculum. The six station curriculum was underpinned by the pedagogical framework of experiential education and deliberate practice. Instructor and participant feedback directed subsequent curriculum modifications. Curriculum, Tool, or Material: This one-day intensive curriculum was successfully implemented at two Canadian EM residency programs for 54 EM residents, from both CCFP-EM and FRCP-EM streams. Participant feedback was highly favorable. An iterative approach to curriculum implementation at two separate residency programs effectively allowed educators to respond to participant needs. Conclusion: A novel simulation-based curriculum for rare procedures in EM is feasible, practical, and highly valued by participants. Ongoing work is underway to refine the curriculum and assess its efficacy in creating competence. Deliberate practice and Kolb’s theory of experiential education provide useful frameworks for technical skills training.

Keywords: innovations in EM education, simulation, procedure

LO097
A novel curriculum for assessing competency in resuscitation at the foundations of discipline level of training
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Introduction / Innovation Concept: Junior residents are often the first physicians who attend to the acutely unwell floor patient, especially at night and on weekends. The “Nightmares Course” at Queen’s University was designed to address an Entrustable Professional Activity (EPA) relevant to several residency programs at the ‘Foundations of Discipline’ level of training: “to manage the acutely unwell floor patient for the first 5-10 minutes until help arrives”. In keeping with competency based medical education principles, this course offers longitudinal and repetitive practice and assessment. We have also designed a summative objective structured clinical exam (OSCE) in order to identify trainees who require additional remedial practice of this EPA. Methods: We developed simulated cases that reflect common but “scary” calls to the floor. We then, using a modified Delphi process with experts in resuscitation, defined relevant milestones applicable to the Foundations of Discipline level of training in order to inform our formative assessment. We also modified the Queen’s Simulated Assessment Tool (QSAT) to adopt CBME terminology and this will be used to provide a summative assessment during a four-scenario OSCE in the spring. Residents with QSAT scores below the competency threshold will be enrolled in a remediation course. Curriculum, Tool, or Material: Weekly sessions were led by staff physicians and were offered to first-year residents from internal medicine, core surgery, obstetrics and gynecology, and anesthesiology over the academic year. Each resident participated in one session every 4-week block. Sessions were organized into themes such as “shortness of breath” or “decreased level of consciousness” and involved three high-fidelity simulated cases with a structured debrief following each case. Formative feedback was given following each case. Conclusion: The Nightmares Course is a novel simulation-based, multidisciplinary curriculum in resuscitation medicine. It includes longitudinal practice and repetitive assessment, as well as summative testing and remediation of an EPA common to several residency programs.

Keywords: innovations in EM education, postgraduate medical education, resuscitation