thirty-two participants played the game (13 emergency physicians, 15 residents, and four nurses). Overall responses to the post-gameplay survey showed that players endorsed GridlockED as a useful potential teaching tool (75%, n = 24/32) and the majority felt that it had the potential to improve patient flow in the ED (56%, n = 18/32). Most participants found that the game was easy to play (91%, n = 27/29), and that the instructions were clear (87.5%, n = 28/32). Respondents also felt that the game reflected real life scenarios (56%, n = 18) and that cases reflected the types of patients that they saw in the ED (78%, n = 25). **Conclusion:** Our results have shown an overall positive response to GridlockED, with most participants supporting it as both an engaging board game and potential teaching tool. We believe that future studies with larger sample sizes and medical students will further validate the use of serious games in medical education.
Keywords: simulation, education, serious games

P074
Comparison of unmanned aerial vehicle technology versus standard practice in triaging casualties by paramedic students in a mass casualty incident scenario
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Introduction: The proliferation of unmanned aerial vehicle (UAV) technology has the potential to change the way medical incident commanders respond to mass casualty incidents (MCI) in triaging victims. The aim of this study was to compare UAV technology to standard practice (SP) in triaging casualties at a MCI **Methods:** A randomized comparison study was conducted with forty paramedic students from the Holland College Paramedicine Program. Using a simulated motor vehicle collision with moulaged casualties, iterations of twenty students were used for both a day and a night trial. Students were randomized to an UAV or a SP group. After a brief narrative participants either entered the study environment or used UAV technology where total time to triage completion, green casualty evacuation, time on scene, triage order and accuracy was recorded **Results:** A statistical difference in the time to completing of 3.63 minutes (95% CI: 2.45, 4.85, p = 0.002) during the day iteration and a difference of 3.49 minutes (95% CI: 2.08,6.06, p = 0.002) for the night trial with UAV groups was noted. There was no difference found in time to green casualty evacuation, time on scene or triage order. One hundred percent accuracy was noted between both groups. **Conclusion:** This study demonstrated the feasibility of using an UAV at a MCI. A non clinical significant difference was noted in total time to completion between both groups. There was no increase in time on scene by using the UAV while demonstrating the feasibility of remotely triaging green casualties prior to first responder arrival.
Keywords: disaster medicine, unmanned aerial vehicle, emergency medical services

P075
Discovering the unknown: using storytelling to identify emergent learning needs for the intrinsic competencies within an online needs assessment
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Introduction: Free Open Access Medical education (FOAM) resources have been developed using various needs assessment methods. We describe a storytelling exercise used to identify unperceived medical expert learning needs, which also resulted in the emergence of unknown learning needs within intrinsic physician roles. **Methods:** A FOAM curriculum was created for thrombosis based on an online needs assessment comprised of a topic listing, case scenarios, and a storytelling exercise. In the storytelling exercise, learners described i) a difficult case in thrombosis, and ii) why that case was difficult. In this qualitative description study, we performed a secondary thematic analysis of this storytelling data, coded for CanMEDS 2015 intrinsic roles. Two investigators independently coded transcripts to iteratively generate a coding framework. **Results:** 143 respondents completed the storytelling exercise. All responses yielded a gap in medical expertise, while 25 (17.5%) described an additional intrinsic theme. Learning needs in all six intrinsic roles were identified. The most commonly cited learning needs were in the Leader (recognizing how resource allocation impacts healthcare), Communicator (communicating expert knowledge with patients), and Collaborator (unclear communication between providers) domains. Participants who described an intrinsic learning need were primarily from emergency medicine (21/25, 84.0%). These excerpts were notable for how they expressed the complexity and affective components of medicine. **Conclusion:** Storytelling exercises can highlight context, attitudes, and relationships which provide depth to needs assessments. These narratives are a novel method of capturing emergent learning needs, which may be unknown to learner and faculty (Johari window). These intrinsic learning needs may ultimately be used to enrich learner-centered curricula.
Keywords: needs assessment, free open access medicine, storytelling

P076
Choosing Wisely: hemoglobin transfusions and the treatment of iron deficiency anemia
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Introduction: Choosing Wisely Canada has identified blood transfusions as a priority area for improving clinical appropriateness. Relevant recommendations include Dont transfuse blood if other non-transfusion therapies or observation would be just as effective. In parallel with this recommendation, the Alberta division of Towards Optimized Practice (ToP) has developed guidelines for the treatment of iron deficiency anemia (IDA) that emphasize the use of non-transfusion therapies (i.e. parenteral or oral iron, in appropriate patients). Choosing Wisely also emphasizes strategies to better engage patients in shared decision making. **Methods:** In order to better engage patients in shared decision making about their treatment options, both physician and patient handouts were developed using an iterative process. The development of the patient-facing documents began with a synthesis of educational materials currently available to patients with IDA. Clinical leaders from nine different specialties (Emergency Medicine, Family Medicine, Day Medicine, Hematology, and others) were continually engaged in the development of content using a consensus model. A focus group of ESCN patient advisors was assembled to review materials with an emphasis on: (1) Are the patient materials easily understood? (2) Are intended messages resonating while avoiding unintended messaging? (3) What information do patients require that has not been included? Following the focus group, revisions were made to patient materials and a subsequent online survey confirmed that the final version addressed any issues they had raised. **Results:** A four-page patient handout/infographic was developed utilizing best practices in information design, and in physician and patient engagement. Content includes the causes and symptoms of IDA, progressive treatment options from dietary

changes to transfusion, and the four Choosing Wisely questions to discuss with your doctor. **Conclusion:** Patient education materials can be developed according to best practices in information design and stakeholder engagement. Patient focus groups demonstrate that such materials are easier to understand, and better equip patients to engage in shared decision making.

Keywords: innovations in emergency medicine education, shared decision making, knowledge translation

P077

The health inequalities among foreign patients visiting the emergency room with injury: a nationwide population-based study in South Korea, 2013-2015

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Introduction: Foreign patients often do not receive appropriate treatment in the emergency room as compared to locals. This is due to various causes such as language, insurance, and cultural differences. The purpose of this study was to investigate whether there is a wide range of health inequalities among foreigners who visited the emergency room with injury and to find out what causes it. **Methods:** We analyzed clinical data from the National Emergency Department Information System (NEDIS) database, which visited the emergency room from January 1, 2013 to December 31, 2015, in all age groups. Foreigners are classified based on the personal information described in the NEDIS. We analyzed the number of injuries, serious cases (death, operation, ICU admission), length of stay in ER, and transfer ratio. **Results:** A total of 4,464,603 cases of injured patients were included, of whom 67,683 were foreign patients. The incidence rate per 100,000 people per year was 2960.5 from locals and 1659.8 from foreigners. Serious outcomes were higher for foreigners than for locals (31.0% versus 23.2%, $p < 0.001$). There was a further difference in the rural region. Length of stay was longer for foreigners (72 vs. 69 minutes, median, $p < 0.001$). The transfer rate was also higher for foreigners (1.9% versus 1.6%, $p < 0.001$). Daegu had the highest ratio of foreigners' injury compared to locals (ratio = 0.998). Jeonnam (0.073) was the highest serious outcome rate in Korea, and Jeonbuk (0.070) was the second. The area with the longest length of stay in the Emergency department was the median 139 minutes for locals and 153 minutes for foreigners in Daegu. The more patients per day, the shorter the time spent in the emergency rooms (Spearman correlation coefficient = -0.388). This phenomenon was more prominent in locals (-0.624 vs. -0.175). Multivariable logistic regression was used as a dependent variable for the serious outcomes of foreign patients. The foreign patients (OR = 1.413, $p < 0.001$), intention, no insurance, age, sex, urban area, low blood pressure, decreased consciousness, transfer, acuity, and length of stay were statistically significant. **Conclusion:** This study showed that there is a health inequality for foreigners who came to the emergency room due to injury in Korea. Also, serious outcomes from injury in foreigners have been shown to be related to various causes including factors of the foreigner.

Keywords: foreign patient, emergency, outcomes

P078

If you build it they will come: use of live actor patients during a hospital-wide mass casualty simulation exercise to garner institutional commitment to long term drills

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Introduction: BACKGOUND In the modern era of terrorism and senseless violence, it is essential that hospital staff have expertise in implementation of a mass casualty incident (MCI) plan. OBJECTIVES 1. To assess current gaps in implementation of an academic urban hospital code orange plan using live simulation and tabletop exercise. 2. To identify and educate front-line staff to champion a hospital-wide MCI plan. INNOVATION Historically, in order to limit resource utilization and impact on patient care, disaster response training of front-line staff involved tabletop exercises only. The tenets of experiential learning suggest that learner engagement through realistic active practice of skills achieves deeper uptake of new knowledge. We enhanced the traditional tabletop approach through novel use of live actor patients presenting to an academic, urban emergency department (ED) during a hospital-wide MCI simulation. **Methods:** To assess the current code orange plan, an interprofessional, committee comprising expert leaders in trauma, emergency preparedness, emergency medicine and simulation integrated tabletop and live simulation to stage a MCI based on a mock incident at a new subway station. ED staff, the trauma team and champions from medicine, surgery and critical care participated along with support departments such as Patient Flow, Patient Transport, Environmental Services and the Hospital Emergency Operations Centre. Ten live actor patients and eight virtual patients presented to the ED. The exercise occurred in situ in the ED. Other participating departments conducted tabletop exercises and received live actor patients. **Results:** CURRICULUM Staff decanted the ED and other participating units using their current knowledge of hospital code orange policy. Live and virtual patients were triaged and managed according to severity of injuries. Live actor patients were assessed, intervened and transported to their designated unit. Virtual patients were managed through verbal discussion with the simulation controllers. An ED debrief took place using a plus/delta approach followed by a hospital-wide debrief. **Conclusion:** CONCLUSION An interprofessional hospital-wide MCI simulation revealed important challenges such as communication, command and control and patient-tracking. The exercise ignited enthusiasm and commitment to longitudinal practice and improvement for identified gaps.

Keywords: innovations in emergency medicine education, mass casualty incident, simulation

P079

Transition to practice: evaluating the need for formal training in supervision and assessment techniques among senior emergency medicine residents and new to practice emergency physicians

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Introduction: Final year emergency medicine residents may be transitioning to practice with little to no training on how to effectively supervise and assess trainees. It remains unclear how comfortable final year residents and new-to-practice physicians are with these competencies. The goal of our study was to examine physician comfort with supervision and assessment, whether there was a perceived need for formal training in these areas, and what gaps, barriers and enablers would exist in implementing it. **Methods:** Qualitative data were collected in two phases during September 2016-November 2017 through interviews of PGY5 emergency residents and new-to-practice staff at the University of Toronto and McMaster University in Ontario, Canada. A semi-structured interview guide was developed and used