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Authors

DiGaetano, Michael

McGoldrick, Mary

Jong, Michael

[et al.](#)

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51 The Game Is Afoot!: A Simulation Designer's Implementation of Escape Rooms In Graduate Medical Education

Michael DiGaetano, Mary McGoldrick, Michael Jong, Colleen Donovan

Introduction: Medical education escape rooms (ERs) are experiential, game-based simulations (sim) that have grown in popularity over the last decade. While ERs are fun and motivating for learners, they challenge sim designers to step out of their comfort zones to deliver quality experiences. Emergency Medicine (EM) ER design must include an engaging storyline and automated-feedback puzzles (e.g., incorrect solutions prevent forward progress), while testing critical EM concepts. We sought to develop an in-person ER that requires teams to apply key EM milestones to solve a mystery and escape in under 40 minutes.

Educational Objectives: -Challenge learner clinical reasoning and procedural skills within the EM scope of practice -Recreate the excitement of a commercial ER -Integrate wellness activities into core curricular learning.

Curricular Design: EM residents and sim directors designed an ER as an engaging, multimodal teaching experience. Station skills were derived from ACGME requirements including toxin identification, pathologic image recognition, cardioversion, ultrasound, CPR, management of shock states, suture tying, incision and drainage, and airway management. The ER consisted of modular stations that targeted desired skill retention. Participants were surveyed regarding their comfort with each task and their perceived value of an ER as an educational tool. This exercise achieved results consistent with Level 2 of the Kirkpatrick model of evaluation.

Impact/Effectiveness: Learners performed integration of key practical skills and medical decision making in order to complete trials under time constraints. 100% (16/16) of learners successfully escaped the room and agreed or strongly agreed that this exercise was a good use of their

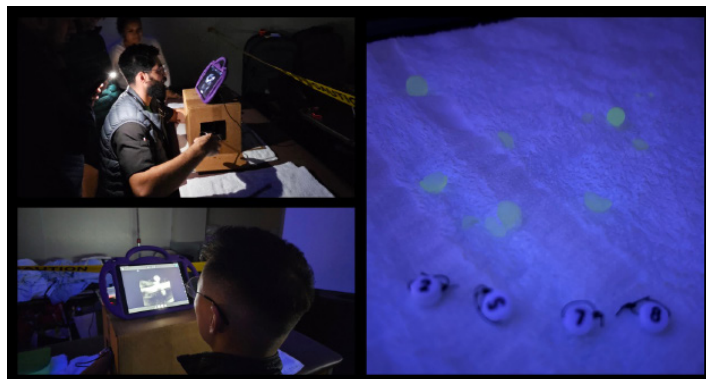


Figure 2.

educational time. Almost all expressed strong interest in future ER learning. We intend to expand and encompass additional skills noted in ACGME requirements while having fun and tackling burnout.

52 The Simlympics: A Novel Gamified Simulation Competition for Emergency Medicine Residents

Thomas Sanchez, Jessie Chen, Brian Smith, Sheetal Sheth, Anika Nichlany, Kallie Combs, Anita Lui, Rozalyn Hesse, Michael Levine, David Simon, Catherine De Guzman, Richard Shin

Introduction: Experiential and interactive learning methods can benefit EM residents over lecture-based curricula. Incorporating gamification into didactics promotes participation from learners. We created a simulation-based competition for our learners as an alternative to typical simulation-based learning which involves case-based learning and procedure labs.

Objectives: Our goal was to redesign a simulation-based conference to incorporate gamification and teamwork amongst the residents. This provides a novel approach to case-based learning and procedure labs while maintaining a dynamic, engaging learning environment.

Curricular Design: 4 30-minute stations targeted EM resident skills. To foster communication and leadership skills, 2 case-based stations were created. For procedural training, 2 task-trainer stations were used. The first station was a “fast-track relay” where learners practiced skills like hemorrhoidectomy and nail bed lacerations. The next station stressed communication, as team members were forced to hand off care every 60 seconds to advance the sim case. The third station was a race with airways of increasing difficulty. The final station was a case in which a blind-folded leader ran a resuscitation relying only on verbal communication. Each station was assessed for accuracy and time to completion. A winning team was selected by the faculty judges.



Figure 1.