Figure.

49 Single, Daily Multiple-Choice-Question: A Microlearning Tool for a Core Emergency Medicine Clerkship

Moises Gallegos, MD, MPH; William Dixon, MD, MSEd; Danielle Miller, MD

Learning Objectives: We sought to deliver interspersed, concise teaching points on core content while providing direction for additional reading. Using pre-scheduled learning sets messaged to students each morning, we also hoped to create a more cohesive and dedicated learning experience.

Abstract:

The breadth and depth of Emergency Medicine (EM) can be both attractive and daunting for medical students exposed to the specialty on clinical rotations. For clerkship directors and education faculty, it can be difficult to review a representative amount of content in the short duration of a clerkship. For students, it can be challenging to know where and what to read for end-of-clerkship exams. Furthermore, social-distancing policies during the COVID-19 pandemic limited in-person instruction, potentially contributing to perceptions of decreased formal teaching. Creative use of interspersed learning sets can provide direction for and supplement the clerkship curriculum.

EMED Daily was created as part of a required EM clerkship at Stanford. Each EMED Daily is a single, multiple-choice-question (MCQ) bundled with relevant medical and procedural knowledge, as well as testing strategy for core EM content. Online survey software is used to automate the delivery of the next EMED Daily each morning. Building on concepts of "pushed" delivery from eLearning and digestible teaching moments from Microlearning, the EMED Daily allows students to engage in retrieval practice and review curated material while eating breakfast, brushing their teeth, or walking to shift. Learning sets reflect core topics from the Clerkship Directors in EM (CDEM) medical student curriculum and include links to free open access medical education (FOAMEd) resources. MCQs are not graded individually, but a completion rate of 75% is required for credit towards a final grade.

The EMED Daily has been well received by students. In 6 months, the average completion rate was 96%, well above the required amount. Students commented that the EMED Daily sets "were simple and good for framing," and "a great way to review a small amount of info every day." Additionally, as COVID policies affected the type of patients students could see, question sets were adjusted to supplement learning as needed.

50 Snow White Escape Room: Gamification for Emergency Medicine Residents

Kevin Hon, DO; Anita Lui, DO; Marion-Vincent Mempin, MD, FACEP

Learning Objectives: Our goal was to gamify medical education for emergency medicine (EM) residents by creating an Escape room based off of various EM topics. We hypothesize that our novel learning session would improve resident engagement and knowledge retention over traditional, lecture-based conferences.

Abstract:

Introduction: Today's emergency medicine (EM) residents are learning differently than their educators and benefit from more immersive education over lecture-based curricula. An Escape Room provides a unique opportunity to gamify learning for residents to collaborate, synthesize, and engage in a competitive environment in order to escape a locked room. This mini-curriculum provides stepwise instructions and tools needed to implement an escape room.

Curricular Design: Residents were assessed on their understanding of START triaging, toxicology, ventilators, venereal diseases, ultrasound, hyponatremia, and electrocardiograms. Residents were divided into four equal groups. There were seven locked puzzle boxes placed in the front of a classroom that sequentially led to the next puzzle. All groups attempted to "escape" their rooms simultaneously by sending a runner to unlock the corresponding box. Faculty members assisted with hints and assessed for the correct solutions. Learners were challenged with a series of Snow White themed puzzles. (Full description of the puzzles are available as an appendix for educators but have been purposefully omitted to prevent exposure to potential learners). Teams were timed, penalized for hints, and given