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The House Cup Challenge: A Gamified Curriculum for Emergency Medicine Residents

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Educational Objective: To design an educational experience for senior medical students that addresses coping with medical errors.

Curricular Design: We designed and implemented an educational experience within the established fourth-year capstone course at our institution, which is a required 2-week curriculum that prepares 4th year students for the transition to internship. After a brief lecture on medical errors, students participated in a standardized patient encounter in which they were required to disclose a medical error to the spouse of a critically ill patient. The error in the scenario was administration of an incorrect antibiotic leading to anaphylaxis requiring intubation. The standardized patients were instructed to portray strong emotions appropriate to the situation, including anger, shock, and grief, requiring students to navigate the error disclosure process in a realistic way. Afterwards, students participated in group debriefing focused on the challenges of disclosing medical errors and the impact of error on professional identity. Student feedback on the curriculum was obtained using a post-course survey.

Impact: This novel experience addresses an under-recognized but important topic in medical education. Among participating students, 94% agreed that medical error is an important topic, and 92% felt more comfortable discussing medical errors. Formal instruction in coping with medical errors may help mitigate the adverse psychological impact of making medical errors in clinical practice, and better prepare students for the transition to residency and beyond.

7 The House Cup Challenge: A Gamified Curriculum for Emergency Medicine Residents

Marion-Vincent Mempin, Brian Smith, Suji Cha, Jessie Chen

Learning Objectives: Our goal was to create a bespoke annual competition that incentivizes residents' participation both during conference and outside scholarly activities as well as foster camaraderie between residents and boost morale of the residency program.

Introduction: Current emergency medicine (EM) residents have different learning styles and benefit from a more immersive educational strategy over classic, lecture-based curricula.^{1,2,3,4} Integrating gamification into a didactic curriculum has been shown to boost learners' participation.² An annual competition that incentivises residents' participation in conference and scholarly activities can motivate educators to create more interactive learning tools and encourage resident participation.

Objectives: Our goal was to create an annual competition in which residents earn points based on various competitions and completion of scholarly activities. We hypothesize that

our novel competition will motivate residents to participate in conference activities and scholarly activities, as well as foster camaraderie between residents and improve overall morale.

Curricular Design: Residents were randomly sorted into four groups at the beginning of the academic year with an equal distribution of PGY levels. Residents had opportunities to earn points for their teams through a variety of predetermined activities including individual and team-based competitions during conferences and completion of scholarly activities. Points could also be deducted for missed deadlines. The challenge spanned the academic year and the group with the highest points was awarded prizes.

Impact/Effectiveness: Our House Cup Challenge has stimulated resident participation, fostered camaraderie, and improved residency morale. Residents completed an anonymous Likert scale survey to assess the impact of the competition. 73% report that the challenge boosted overall morale and 70% report that it helped foster camaraderie with co-residents. In terms of education, 62% of the residency were incentivized to participate in activities in which they otherwise would not have participated and 66% would want to participate again next year. This competition can be easily integrated into any EM residency curriculum.

8 Battle of the Classes: Experiential Learning Through the Gamification of Conference

William Chan, Kent Li, David Simon, Anika Nichlany, Richard Shin, Anita Lui, Kallie Combs, Akshay Elagandhala

Learning Objectives: 1) Improve active engagement of learners through gamification. 2) Prepare learners to appropriately respond to mass casualty incidents. 3) Understand the management of multiple disease processes secondary to trauma and environmental factors.

Background: With traditional models of teaching falling out of favor, there is increased evidence supporting hands-on and experiential learning models. Gamification is a dynamic avenue that stimulates learner engagement by incorporating elements of game design to non-game contexts. However, its utility as a learning tool has not been formally examined as part of a residency curriculum. We aim to augment existing learning models by implementing gamification in a SimWars-based conference curriculum.

Educational Objectives: 1) Improve active engagement of learners through gamification. 2) Prepare learners to appropriately respond to mass casualty incidents. 3) Understand the management of multiple disease processes secondary to trauma and environmental factors.

Curricular Design: Learners (EM residents) were divided into three teams corresponding to their years of post-graduate training. Each team participated in treating a