

set of simulated patients that were deemed to be appropriate for their level of training. Cases included the following patient scenarios: exposure to an unknown environmental agent, hazardous building fire, mass casualty incident triage, and hemorrhagic shock management. Learners not directly involved in the case observed from the audience. This three-hour simulation session was conducted during weekly conference using simulation mannequins, high-fidelity low-cost models, and faculty acting as patients and other personnel. Designated faculty members judged teams on their teamwork and management. After each case, faculty members conducted a debrief focused on the educational objectives for the case. After the simulation session, the residents completed a likert-type survey to assess resident learning and engagement.

**Impact:** The residents provided overwhelmingly positive feedback. They found that this simulation was more educational than other types of activities, helping them better understand and manage the relevant emergent pathology.

## 9 Gotta Escape EM all! Emergency Medicine Resident Education with Gamification

*Kevin Hon, Marion-Vincent Mempin*

**Learning Objectives:** Priapism drainage; Common causes of hyperkalemia; Pacemaker EKGs and errors; Common toxic botanicals and their treatments; Beta-blocker toxicity management; Psychiatric medical emergencies; Resuscitation of adult and pediatric burn victims; Wilderness resuscitation skills.

**Introduction/Background:** Traditional conferences provide a uniform, didactic review. Modern residents can benefit from a structure that engages them in active learning with immersive and collaborative experiences. Activities like flipped classrooms, simulation, and virtual learning have improved upon the ennui of prior conferences. We seek to appropriate the escape room to review key, uncommon topics in emergency medicine (EM) as a conference activity to address areas of improvement in residents' knowledge prior to their in-training exam (ITE).

**Educational Objectives:** At the completion of the escape room activity, residents and medical students will be tested upon and be able to perform the following: Priapism drainage Common causes of hyperkalemia Pacemaker EKGs and errors Common toxic botanicals and their treatments Beta-blocker toxicity management Psychiatric medical emergencies Resuscitation of adult and pediatric burn victims Wilderness resuscitation skills.

**Curricular Design:** A survey-based needs assessment was done by EM residents about the topics which needed more review before their ITE. Topics were assessed to determine an optimal method for review: lecture, group

session, or gamification. Those selected for gamification were designed to fit a predetermined theme to complement a ninety minute conference lecture alternative escape room. Residents were split into four groups and raced to complete the activity. Afterward, residents were provided a review over each topic and the escape room was surveyed for its effectiveness and satisfaction with respect to the review of the objectives.

**Impact/Effectiveness:** An anonymous Likert scale survey provided to residents showed 90% rating the activity successful in achieving its academic goal and 95% as an activity that residents wanted to implement again in the future. 93% of residents who provided feedback regarding topic selection agreed that the activity addressed their prior curricular deficits.

## 10 Power Half Hour: A Short, Sweet, and Clinical Image-Based Peer-to-Peer Educational Curriculum

*Lauren McCafferty, Leah Carter, Andrew Schaub*

**Learning Objectives:** Our goal was to address knowledge deficiencies encountered by residents on shift through a peer-to-peer didactic curriculum covering high-yield EM core content through a series of clinical images obtained in our ED.

**Background:** In an EM residency curriculum, there are clinical scenarios encountered by trainees that are not adequately addressed in a traditional didactic format. When residents encounter these scenarios, they have the opportunity to enhance their own clinical acumen with "just in time" learning but no organized way to share the new information with their peers. There is evidence showing that peer-to-peer teaching fosters a supportive learning environment while not sacrificing the integrity of content delivered. Additionally, this format solidifies the concepts for the teaching resident and promotes their development into a skilled educator.

**Curricular Design:** In order to address knowledge deficiencies encountered by residents on shift, we created Power Half Hour (PHH), a resident-led didactic series, presented bi-monthly in conference, that centers around a series of clinical images. The images, including a combination of physical exam findings, ECGs, and diagnostic images, are presented with high-yield, clinically relevant teaching pearls.

**Impact/Effectiveness:** Our PHH innovation was incorporated as a recurring series into the resident curriculum. After a year of implementation, residents were surveyed on how educationally beneficial they found PHH. Of the 28 residents who completed the survey, 13 residents (46%) found PHH very beneficial, 12 residents (43%) found PHH somewhat beneficial, and the remaining were neutral. By implementing a clinical image-based