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It's Scarlet in the Study! Deciphering Toxic Pathologies in a Murder Mystery Party

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and 357 in the post-intervention period, resulting in a 210% increase in the number of evaluations completed.

Conclusions: The described intervention significantly increased completion of resident evaluations during the study period. Limitations include a short study period and low survey response rates.

40 It's Scarlet in the Study! Deciphering Toxic Pathologies in a Murder Mystery Party

Michael DiGaetano, Colleen Donovan, Aarsh Shah, Denise Fernandez

Background: Gamification in medical education enhances engagement and learning, but applications for toxin education in EM residency are limited. Our project introduces a “whodunnit” gamified approach to teach EM residents about toxic pathologies, combining storytelling with diagnostic skills. This method addresses an educational gap by embedding toxicology within an interactive mystery.

Educational Objectives:

- Improve clinical reasoning and toxidrome identification via casework
- Engage teams in an exciting and collaborative “whodunnit” setting
- Integrate wellness/team building into core toxicology content

Curricular Design: We chose three complex toxidromes (carbon monoxide, cyanide, and sodium nitrite) as anchors for our “murders.” Set in a fictional town, participants were prebriefed on rules and character profiles (created using generative AI). Three individuals were chosen as “murderers” and only given knowledge regarding their specific toxidrome. Participants were divided into three teams and given 20 minutes to uncover method, motive, and murderer (3Ms) by sifting through physical evidence boxes with “autopsy reports” and toxidrome clues. Teams debated and defended their 3M accusations in an open forum, with a final debrief and review of key toxidromes. Residents completed pre- and post-tests on toxicology topics without specifying game details. They also gave feedback on the game as an educational tool in a post-game survey.

Impact/Effectiveness: There are no published murder mystery-style learning activities in EM residency didactics. This approach yielded a 16.7% increase in toxin knowledge, with PGY2s showing the most improvement in confidence and knowledge. All participants agreed that this session improved toxidrome knowledge and was a good use of their educational time, with 69.6% and 78.3% strongly agreeing, respectively. Future session plans include smaller groups and more toxidromes. This project shows an engaging model with replication potential for EM programs.

41 Assessing Structural Competency Using ACGME Milestones: Uncovering Challenges and Needs

Ridhima Ghei, Taylor Extavour

Background: Efforts to improve cultural competency in Emergency Medicine (EM) residency training have evolved over time. In 2008 and 2011, leaders advocated for curricula that addressed diversity, cultural competence, and implicit bias. By 2020, critiques of traditional approaches prompted a shift toward ‘Structural Competency,’ which emphasizes the societal factors impacting health. The 2021 ACGME Milestones overlap with this mission, especially in Interpersonal and Communication Skills 1 (ICS1) and Systems-Based Practice 3 (SBP3). However, assessing these competencies remains challenging, underscoring the need to understand current practices in order to guide future training.

Objective: This study explores how EM program leaders assess ACGME milestones ICS1 and SBP3, hypothesizing that variations in methods and subjectivity affect residents’ educational outcomes. **Methods:** A focus group was conducted with EM program directors (PDs) and assistant PDs to discuss ICS and SBP milestone assessment practices. Purposive sampling ensured diverse representation in terms of gender, location, and program length. Questions focused on assessment techniques, milestone expectations, and educational initiatives. Two investigators inductively analyzed the transcript, with discrepancies resolved through discussion.

Results: Participants reported varied assessment tools, including shift evaluations, simulation, and faculty/patient feedback, which were compounded by subjective interpretations of milestones and scores simply based on training year. Recommendations included enhanced faculty development around assessment and more standardized processes.

Conclusions: Findings suggest EM residency leaders face challenges and ambiguity in assessing ACGME competencies. Standardizing evaluation processes and establishing guidelines may improve milestone score accuracy and reliability. Clarities around assessment can subsequently guide educational initiatives around structural competency.

42 Job Placement and Satisfaction among Emergency Medicine Residency Graduates

Brian Milman, Stephanie Stroeve, Mary Edens, Fiona Gallahue, Michael Kiemeney, Albert Kim, Miriam Kulkarni, Andy Little, Anthony Sielicki, James Morris

Background: Prior Emergency Medicine (EM) workforce studies projected a future surplus of EM physicians, raising concerns about job prospects for EM trainees. The projected