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Social Determinants of Health Workshop: Utilizing Simulation and Gamification to Increase Social Determinants of Health Education

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lamp use and CFB removal techniques. A simulation model was constructed using a slit lamp, Styrofoam ball, hard-boiled egg, and pencil-lead shavings to simulate embedded corneal foreign bodies. During a structured resident conference session, participants performed CFB removal procedures on the egg-based model under supervision and completed post-simulation surveys. Confidence levels and Likert scale responses were analyzed using paired t-tests in Microsoft Excel.

Results: The simulation led to statistically significant improvements in resident procedural confidence. Mean confidence scores for performing CFB removal increased from 2.38 to 4.76 ($p < 0.001$). Confidence using a needle during CFB removal increased from 1.70 to 4.83 ($p < 0.001$). PGY1 residents demonstrated the largest relative improvement, though significant improvements were observed across all training levels, suggesting broad applicability.

Impact/Effectiveness: Hard-boiled egg simulations significantly improved residents' confidence in CFB removal. This low-cost, accessible model proved practical for procedural education across all PGY levels. Future studies should verify clinical effectiveness and validate performance outcomes.

45 Social Determinants of Health Workshop: Utilizing Simulation and Gamification to Increase Social Determinants of Health Education

Amber Billet

Introduction/Background: There is increasing need to educate Emergency Medicine (EM) residents regarding Social Determinants of Health (SDoH). ACGME requirements aside, residents need preparation to serve the unique patients in their community.

Educational Objectives:

1. Identify and understand the impact of SDoH inequity.
2. Identify the role of community health workers and how they can optimize patient care.
3. Build empathy for those impacted by SDoH factors.

Curricular Design: EM residents participated in a 5 hour workshop. Residents completed a pre-survey prior to a lecture introducing SDoH and objectives. Learners then participated in (4) attending-facilitated mini simulations consisting of 4-6 mixed PGY-level residents per group. Learners rotated through the role of patient, physician, confederate and observer in each of the four simulations which included: incarceration, religion/age, language and racism (Table 1). Each simulation comprised a 15 minute scenario, 8 minute debrief, and 2 minute transition. Learners subsequently rejoined for two brief lectures on community resources and transgender care, then modeled social roles and factors within a board game framework ("The Last Straw" or "Our World"). Residents and attendings completed a post-survey and feedback survey, respectively.

Impact/Effectiveness: A total of 21 residents and 6 attendings participated in the workshop, with 95% and 100% agreeing/strongly agreeing that the activity was a valuable use of conference time, respectively. Comparing pre- and post-survey resident responses, 33% vs 71% ($p=0.01$) agreed/strongly agreed that the ED is an appropriate venue to connect patients with community resources, 29% vs 100% ($p<0.01$) agreed/strongly agreed that they had received specific training on how to identify and intervene on SDoH and 33% vs 86% ($p<0.01$) agreed/strongly agreed that they felt confident in their knowledge of community resources and ability to connect them to patients.

Case #	1	2	3	4
Scenario	Incarceration	Religion & Age	Language	Racism
SDoH Domain	Environment Social Context	Social Context Healthcare Access	Education Access Poverty	Social Context Healthcare Access
Roles	Patient (M), Physician, Officer	Patient (E), Physician, Parent	Patient (F), Physician, Parent	Patient (M), Physician
Set Up	Patient Bed 3 chairs	Patient Bed 3 chairs	Patient Bed 2 chairs	Patient Bed 3 chairs

46 Rural Emergency Department Simulation: Resource Limited, Multipart Case Well Received by Residents

Kjerstin Hensley, Joshua Neumann, Bophal Hang

Introduction: Critical Access Hospitals face staffing shortages as most EM graduates pursue urban positions. Current simulation curricula emphasize high-resource, tertiary environments, leaving a gap in training residents to manage complex, time-sensitive emergencies with limited resources. This innovation introduces a high-fidelity simulation targeting the operational and clinical challenges of a single provider in a rural ED.

Educational Objectives: Prioritize and manage simultaneous high-acuity emergencies with minimal staff and resources; demonstrate effective clinical management of rural-relevant emergencies; execute system-based tasks, such as inter-facility transfer and resource allocation; and maintain professionalism and communication with limited nursing support and distressed families.

Curricular Design: This curriculum utilizes a three-part, single provider, high-fidelity simulation for senior EM residents in a resource limited rural ED. The three concurrent cases included a critically ill patient with a peritonsillar abscess requiring potential airway management and transfer, a patient with postpartum hemorrhage, and a patient necessitating immediate lateral canthotomy. The scenario required rapid task switching, delegation, and resource allocation. Residents completed a post-simulation survey for feedback, and performance was evaluated using a customized milestones tool and structured debrief (Supplement 3).

Impact / Effectiveness: The simulation has been