UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

The Benefits of Simwars in Second Year Medical Education

Permalink

https://escholarship.org/uc/item/440483fs

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 27(2.1)

ISSN

1936-900X

Authors

Patton, Daniel
Anthony, Peter
Reagan, Lee
et al.

Publication Date

2026-03-27

DOI

10.5811/westjem.64200

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

eScholarship.org Powered by the California Digital Library
University of California

29 A Novel Experiential Learning Curriculum for Rural Emergency Medicine Training

William Brown, Nick Caputo, Joshua Justice, Craig Sheedy, Carmen Wolfe

Introduction: Rural emergency medicine (EM) is a broad designation covering practice settings with low-density populations and restricted resource access. With nearly 25% of Americans living in a rural setting, this population can experience both common emergency ailments as well as specific occupational illnesses and injuries. Given that most EM residency programs are in urban or suburban areas, there may be lower familiarity with management of rural emergencies. The implementation of an experiential learning session designed for emergency medicine residents to learn about rural emergencies could provide valuable education they would not otherwise obtain in their typical clinical training settings.

Educational Objective: Increase resident knowledge and confidence in the management of emergencies occurring in rural settings

Curricular Design: This experiential learning day was administered on a farm in a rural region of Tennessee. In situ implementation allowed residents to become familiar with common equipment and geographic features that may be relevant to patient presentations. Residents were divided into six groups of mixed PGY levels and rotated through six educational stations in 35-minute intervals. Topics included crotalid envenomation, grain bin entrapment, farming-related toxidromes, horse-related traumatic injuries, tractor-related injuries, and pediatric rural drowning incidents. A variety of learning methods were utilized including mannequin-based simulation cases, traditional didactic lectures, oral board-style scenarios, and case-based written worksheets.

Effectiveness: An optional survey was conducted at the conclusion of the experiential learning session. All residents (100%) reported increased knowledge and confidence in managing rural emergencies. The majority (96%) preferred this educational activity over traditional classroom learning. Opportunities for future improvement include additional learning stations with expanded topic coverage.

30 The Benefits of Simwars in Second Year Medical Education

Daniel Patton, Peter Anthony, Lee Reagan, Todd Peterson

Introduction: SimWars is a competitive, simulation-based educational format proven to improve resident skills, confidence, and In-Training Exam performance. Despite these benefits, it has rarely been adapted from residency to undergraduate medical education. Second-year medical students, in particular, have limited exposure to emergency medicine (EM) principles and practices.

Objective: To create a competitive simulation event for MS2 students to gain exposure and confidence in treating emergent conditions.

Methods: A SimWars competition was implemented for second-year students at the UAB Heersink School of Medicine, timed immediately after didactics and prior to USMLE Step 1 preparation. The event began with an introductory presentation on effective communication, followed by three high-yield simulation scenarios aligned with Step 1 content. Emergency medicine residents utilized objective rubrics to score participants on accurate diagnosis, disease management, and communication. Each scenario concluded with a structured debrief focusing on core case facts and the application of EM principles to critically ill patients. Post-event, all participants completed a survey assessing changes in confidence and comfort in emergency settings.

Results: Results showed that most students reported increased confidence in diagnosing and managing acute illnesses

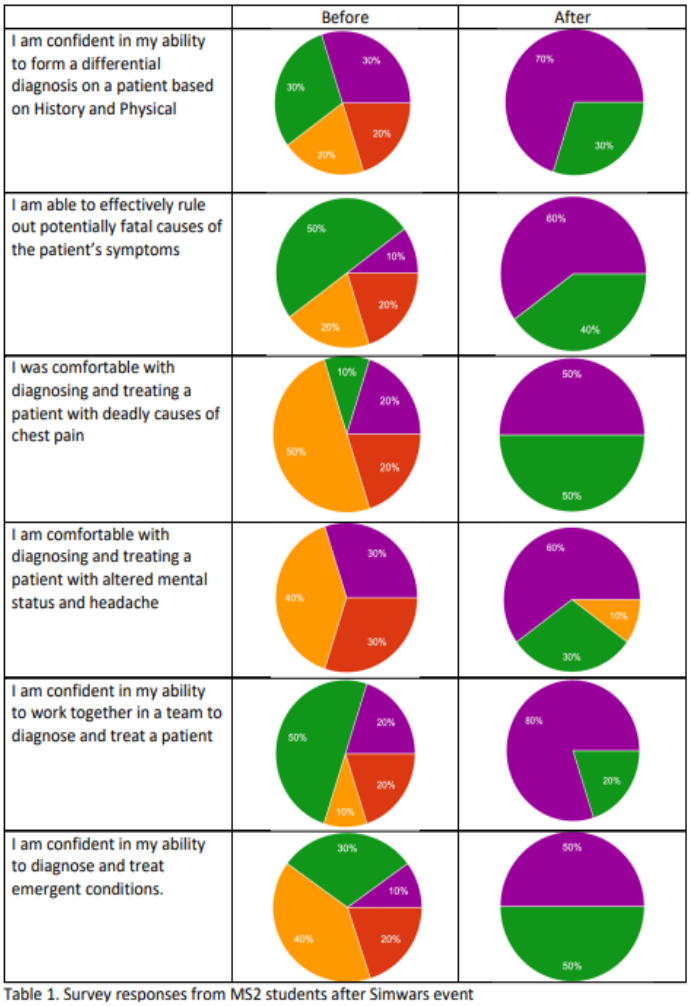


Table 1. Survey responses from MS2 students after Simwars event

across multiple organ systems (Table 1). The most notable changes were seen with 70% of students reporting a significant increase in confidence in treating chest pain and 60% reporting an increase in confidence in treating altered mental status. Participants also noted greater comfort working in the ER, communicating within teams, and consulting with physicians.

Conclusion: SimWars is a feasible and effective educational intervention for pre-clinical medical students. It significantly enhances confidence, comfort, and foundational knowledge in emergency medicine—bridging a critical gap in early clinical training.

31 Bedside Banter: A Serious Game for Practicing High-Stakes Communication in the Emergency Department

Tina Anjali Jagtiani, Thomas Sanchez, Brian Smith, Timothy Khowong

Background: Breaking bad news is a fundamental skill for emergency physicians, yet most residents have limited opportunities to practice before encounters with real patients and families. These encounters are emotionally charged, often occur without warning, and demand not only clinical expertise but also empathy, communication, and emotional intelligence. Despite the importance of these "soft skills," structured practice and feedback are rare in residency training. The new ABEM certifying exam further underscores the importance of high-stakes communication, highlighting the need for innovative and effective teaching strategies.

Objectives: To create and evaluate Bedside Banter, a novel serious game combining "Mad Libs"-style prompts and role-play, to help EM residents practice high-stakes communication in a supportive environment. Goals include improving resident confidence, encouraging use of structured approaches (e.g., SPIKES), and providing an engaging way to teach and reinforce communication skills with real-time peer and faculty feedback.

Curricular Design: Residents were divided into small groups and rotated through roles: physician, patient/family member, scenario writer, and observer. A dice roll determined the case scenario, which was then customized "Mad Libs"-style before role-play. Observers scored participants using a structured rubric. Pre- and post-surveys using a 5-point Likert scale assessed comfort with delivering bad news and the use of a structured communication framework such as SPIKES. Paired t-tests were used for analysis.

Impact: Twenty-three residents completed surveys. Comfort with sharing difficult news improved from 3.09 ± 0.95 to 4.04 ± 0.56 ($t(22) = 4.00$, $p = 0.0006$, Cohen's $d = 0.83$, large effect). Self-reported use of a structured approach increased from 2.87 ± 1.10 to 4.43 ± 0.73 ($t(22) = 5.00$, $p < 0.0001$, Cohen's $d = 1.04$, very large effect). Residents reported high engagement and valued real-time feedback. Bedside Banter is a low-resource, high-yield educational tool that promotes active learning, fosters a safe environment for practicing difficult conversations, and improves resident confidence and structured communication. This innovation directly addresses communication competencies emphasized by ABEM and may be adaptable to other programs.

32 "Actually, I'm Trans": A Skills-Based Curriculum to Improve Emergency Care for Transgender and Gender Diverse Patients

Adam McFarland, Daniel Saadeh

Introduction: Transgender and gender diverse (TGD) patients experience significant inequities in emergency care. ACGME guidelines emphasize culturally competent care, but most EM residencies provide minimal or no training on TGD health. This gap creates EM physicians who lack competency and may perpetuate disparities. We developed a practical, skills-based curriculum utilizing Kern's framework to enhance EM residents' confidence and competence in caring for TGD patients.

Objectives: Define terminology related to sexual and gender identity, perform an inclusive history and physical exam for TGD patients, describe key health-care needs and disparities affecting this population, and apply learned skills in a simulated environment.

Curricular Design: A needs assessment drawing on medical education literature, patient experience studies, and community resources informed curriculum development. LGBTQ+-identified education faculty designed a one-hour interactive session on terminology, pronoun use and error recovery, health disparities, and ED-specific presentations. Learners practiced these skills in breakout groups with immediate feedback. 4 weeks later, residents participated in a simulation based on a real patient case requiring gender identification, trust-building to perform a pelvic exam, and mitigating patient gender dysphoria. Simulation-trained faculty with expertise in LGBTQ+ healthcare led a structured debrief. Pre- and post-session surveys assessed learner confidence (Kirkpatrick Level 1).

Impact: Twenty-six residents participated in the initial didactic session. 91% had prior education in TGD patient care. Post-session, 97% reported increased confidence discussing gender identity and 92% in performing an organ inventory. Nearly all (97%) found the workshop valuable for their development and felt it should be continued. Fourteen residents completed the simulation, and eleven completed the post-simulation survey. 100% reported increased confidence discussing gender identity and navigating gender dysphoria. 100% felt it was valuable and would inform future clinical practice. This feasible, reproducible curriculum improved EM residents' comfort and knowledge in TGD patient care. Future work will assess sustained impact in the clinical environment.