UC Irvine

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

Title

The Patient Experience: An In Situ Simulation

Permalink

https://escholarship.org/uc/item/63g57148

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 25(3.1)

ISSN

1936-900X

Authors

Rabalais, Jeanne Parsons, Melissa Mannix, Alexandra <u>et al.</u>

Publication Date

2024-03-24

DOI

10.5811/westjem.20483

Copyright Information

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

emergency medicine residency programs. Our innovation utilized simulation-based education, to create an engaging learning environment, where students worked through cases that might be expected of a new intern. There were a total of six simulated cases, utilizing high-fidelity mannequins and live actors, which included procedural and medical knowledge learning objectives.

Impact/Effectiveness: Overall, there was a statistically significant improvement in both medical knowledge scores (with an increase in scores from 50 to 70% (p<0.05)) as well as reported comfortability in procedure performance with scores on a 5-point Likert scale increasing from 2.16 to 4.2 on orotracheal intubation, 2.5 to 3.8 on central line placement, and 1.83 to 3.6 for chest tube placement.

45 Implementation of a Novel Senior Resident "Life Curriculum"

Danielle Kerrigan, Jeremiah Ojha, Michelle Myles, Amy Mariorenzi

Resident education primarily focuses on medical knowledge, patient care, and scientific inquiry as required by the ACGME. However, as senior residents prepare for the transition to attending physician, many questions arise that fall outside of this scope and there is a paucity of literature on strategies to mitigate this. The few published curricula within this subject all focus on a single topic. Our literature search has not yielded any comprehensive curricula to address this transition. To our knowledge, this curriculum is the first of its kind. Our objective was to create a novel curriculum for senior residents to prepare them for life after residency by addressing areas in which residents are expected to be competent upon graduation but are often not explicitly taught. Following Kern's six-step approach, we conducted a needs assessment which showed most residents did not feel our current curriculum sufficiently prepared them for the transition from resident to attending. We designed a "life curriculum" for senior residents covering commonly cited areas of need including: documentation, medicolegal topics, personal finances, and self-reflection. Each session was led by EM faculty or other content experts during existing conference time. Delivery methods were tailored to the topic and included small group discussions, hands-on workshops, and traditional didactics. This curriculum was delivered longitudinally over the course of an academic year. Participants were surveyed before and after each session rating their knowledge and confidence on a five-point Likert scale. Every session showed an improvement in both reported knowledge and confidence, suggesting that residents felt more prepared for life as an attending after participating in the sessions. This curriculum is currently continuing for its second year. In the future, we hope to implement additional

topics based on ongoing residency needs and the changing landscape of emergency medicine nationally.



Figure 1. Results.

Table 1. Life curriculum sessions.

Coding and Billing
Finances: How to Plan for Retirement
Disability Insurance
Medical Malpractice
Contract Negotiation
The Art of Self Promotion
How to Find Passion Outside of Medicine
Learning From Failure

46 The Patient Experience: An In Situ Simulation

Jeanne Rabalais, Melissa Parsons, Alexandra Mannix, Aman Pandey, Alexander Howard

Introduction/Background: As a county safety-net hospital, there are many stress points in an ED visit for our patients. As physicians, we often do not realize these stress points. Prior work links empathy and positive physicianpatient relationships to improved healthcare outcomes. New learners would benefit from understanding common patient frustrations, worries, and fears as the patient navigates through the ED.

Objectives: Increase understanding of patient flow through the ED - Recognize patients' challenges and frustrations during their ED visit - Enhance communication skills to effectively address patient concerns and alleviate anxieties -Reflect on personal biases and assumptions that may impact patient care -Improve teamwork and collaboration by understanding the roles and perspectives of different healthcare professionals involved in patient care. **Curricular Design:** The project started with a needs assessment of the PGY-2 class. We queried familiarity with locations in the ED, patient processes, ED services, and causes of patient frustrations. We used this information as targeted learning points for our curriculum. PGY-1s were given a pre-survey. They were put into groups to go through an in situ simulated patient experience in different areas of our ED. The simulation consisted of triage, bed placement and monitor hook-up, registration, transportation to imaging, etc. A debriefing session was conducted and the post-survey was given.

Impact: PGY-1s reported they had an increased understanding of ED patient flow, contributing factors to patient frustrations, and the connection between patient experiences and patient outcomes. All participants selected that this experience will positively impact their ability to relate to patients and be valuable to their medical education. Conducting an in situ patient experience simulation is a practical and effective way to develop empathy in residents and increase their responsiveness to patients' needs and concerns.

47 Development of a Social Determinants of Health Curriculum for Emergency Medicine Residents

Rachel Miller, Hyunjoo Lee

Background: Social determinants of health (SDH) encompass factors such as race, gender, living situation, economic status, access to food, and access to healthcare. The impact of SDH has been shown to play a larger role in people's overall well-being and health than the medical care that physicians provide. Understanding the impact that SDH has on patients will allow Emergency Medicine (EM) physicians to provide more comprehensive and patientcentered care.

Educational Objectives: A curriculum was created to teach residents about a variety of SDH issues with the goal of making them more informed, comfortable with the associated terminology and concepts, and emphasizing the need to address SDH while caring for patients in the emergency department.

Curricular Design: The curriculum consisted of four one-hour long lectures, given during the orientation month for incoming Stony Brook EM interns. Didactics were structured using powerpoints, videos, and data from peerreviewed literature. The lectures covered topics of food insecurity, racial disparities, sexism/gender disparities, gender identity and sexual orientation. Pre- and post-lecture surveys were obtained to assess the residents' changes in their understanding and knowledge base.

Impact: EM residents are mandated to receive training in SDH, but the method and manner of this education

is highly variable. The development of our curriculum allowed for dedicated time to address SDH training. Survey results support that this curriculum significantly improved residents' understanding of key concepts, comfort level addressing these concepts with patients, and confidence integrating concerns about SDH into treatment plans. Though additional topics will need to be covered as the curriculum evolves, this current curriculum can serve as an initial template for other residency programs in the development of their own SDH curriculum.

48 Escaping the Wilderness Using a Gamified Team-Based Learning Curriculum

Timothy Khowong, Kevin Hon, Aurora Jin, Vidhi Rao

Introduction/Background: Emergency Physicians must be equipped to perform emergency stabilization in the variety of situations that people may find themselves ill, ranging from cities to remote places. However, some residents may have little exposure to patients suffering from environmental disorders. To address this problem, we developed a structured, evidence-based curriculum for a wilderness workshop for our residents that utilized gamification to increase engagement and foster communication.

Educational Objectives: By the end of the course, learners should be able to recognize, identify risk factors, triage, describe pathophysiology, predict complications, and develop treatment plans in patients suffering from ingestions and envenomation, mass casualty incidents, altitude and submersion incidents, temperature-related illness, radiation and blast emergency, and wilderness trauma.

Curricular Design: Our curricular design modified the commonly used team-based learning (TBL) framework with gamified elements. The individual readiness assessment test was created with a series of 36 MCQs and was given just prior to the start of the session. We designed a gamified group readiness assessment test in the style of an escape-room with parallel puzzles that were topic-relevant. Participants were then divided into four teams and competed to complete each of the stations.

Impact/Effectiveness: Learner feedback to the session was overwhelmingly positive with an average 4.7/5 Likert rating for relevance and amount of information covered. Their question bank assessments at the end of the year showed a significant increase in mean scores on environmental topics from 59% to 65% (p<0.05). Our development of a wilderness curriculum can be applied to other programs with similar needs looking to supplement their education. Additionally, the modification of the existing TBL framework with gamified elements showed significant improvement in resident learning of a difficult topic.