

UC Irvine

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

Title

Multimodal Rural Emergency Medicine Curriculum: Preparing Residents for Rural Practice

Permalink

<https://escholarship.org/uc/item/2xf4n1q5>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 24(3.1)

ISSN

1936-900X

Authors

Weisman, Ashley
Bounds, Richard
Lentz, Skyler

Publication Date

2023

DOI

10.5811/westjem.61023

Copyright Information

Copyright 2023 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>



Image 1. Deliverable examples from the Fine Arts and Medicine electives.

generalizable to other residency programs and the self-directed format is engaging and mobile. Emergency medicine residency programs should consider offering electives in the medical humanities to improve empathy, communication, observation, and decrease burnout in their residents.

26 Multimodal Rural Emergency Medicine Curriculum: Preparing Residents for Rural Practice

Ashley Weisman, Richard Bounds, Skyler Lentz

Background: Rural regions face EM physician shortages. Most training programs are located in cities and lack rural clinical experiences, didactics, and mentorship to excite and prepare residents for rural EM practice. There is limited data on optimal training methods to prepare residents for rural practice.

Educational Objectives: 1) Provide a multimodal rural EM curriculum that prepares trainees to work in rural EDs. 2) Evaluate our program quantitatively and qualitatively to assess the opportunities and limitations of rural training.

Curricular Design: Our rural EM faculty working group, with extensive experience in rural practice, developed this curriculum based on 2 years of weekly case review from 2 rural critical access hospitals (CAHs). This 3-year program features clinical rotations, lectures, and simulation training. Rotations take place at rural CAHs and remote indigenous hospitals. Lectures and simulation focus on skills required in resource-limited solo practice, such as ventilator management, critical medication mixing, obstetric emergencies, patient transfer logistics, leveraging telemedicine, and prolonged critical care when transport is unavailable.

Impact: During each resident's elective, quantitative data on patient volume, acuity, and procedures is collected; each rotation concludes with a qualitative evaluation of new skills,

unique experiences, and limitations. Our rural EM curriculum has proven successful over the first 2 years. Quantitatively, residents see patient acuity and procedures similar to academic center rotations but gain unique skills from the challenges of a rural environment. Qualitatively, 7 of 7 residents gained new skills and confidence, with 86% choosing a rural practice. We plan to expand our program, share didactic content with other residencies, and open additional rural clinical experiences to trainees nationwide, with the goal of bridging the gap between urban training programs and rural emergency care needs.

27 Multiple Casualty Simulation Scenario Secondary to Natural Disaster at a Music Festival

Shayne Gue, Casey McGillicuddy, Robert Pell, Stephanie Cohen, Andrew Bobbett, Ariel Vera, Tracy MacIntosh, Latha Ganti

Introduction: Communication plays a significant role in medicine, especially in the emergency department. Using simulation will teach learners how to actively listen, delegate roles, and effectively engage with the entire team despite the continuous distractions. This simulation adds innovative value as the elected team leader is blindfolded and therefore must rely solely on team member communication to effectively triage, manage, consult, and appropriately determine the patient's disposition.

Objective: To assess the effectiveness of team communication towards triage, assessment, and management of multiple trauma patients during a mass casualty simulation (MCI) and develop confidence for future real-life applications.

Curricular Design: Learners will begin in a group and should assign roles amongst themselves to manage a critical pediatric patient during a shift in the emergency department. During a simulated earthquake, the team leader is affected by dust and is blindfolded for the rest of the scenario. Three patients will arrive with various traumatic injuries from a nearby music festival. The team will need to quickly assess, stabilize, treat, and disposition these patients appropriately for immediate surgical intervention. During the debrief, the blindfolded team leader should be asked to explain their understanding of each patient's clinical course which can be compared to the non-blindfolded team members in order to determine the accuracy of communication between the team during the MCI. To assess the utility of this project, a pre and post questionnaire to evaluate their knowledge, confidence, and engagement was obtained.

Effectiveness: Table 1 shows the post-tests had significantly higher knowledge scores than the pre-test, $t(48) = 4.64, p < 0.05$. Image 1 demonstrates there was a significantly greater confidence in their ability to handle an MCI in the post than the pre-test, Mann-Whitney $U = 227, p < 0.05$.