

UC Irvine

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

Title

“Rapid Recall in Resuscitation”

Permalink

<https://escholarship.org/uc/item/8ff0b0tz>

Journal

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

ISSN

1936-900X

Authors

Ingram, Taylor

Picard, Lindsey

Pastemack, Julie

et al.

Publication Date

2024-03-24

DOI

10.5811/westjem.20492

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/>



Figure.

40 Implementing A Climate Change and Sustainability Curriculum for Emergency Medicine Physicians

John Quinn, Kristie Taguma, Kavita Gandhi, Hilary Ong, Kevin Rolnick, Guy Shochat, Caroline Lee, Francesco Sergi, Esther Chen

Introduction/ Background: The effect of climate change on health is a growing concern and disproportionately impacts vulnerable populations. Emergency Medicine (EM) physicians will increasingly be called upon to manage climate-related health emergencies and engage in sustainable practices. However, climate and sustainability training are absent from the 2013 Model Curriculum.

Educational Objectives: In an effort to fill this gap in our residency curriculum, we implemented a four-part climate lecture series during the 2022-2023 academic year. The objectives were to 1) prepare trainees to better manage

climate health emergencies, 2) integrate social and racial justice issues into climate discussions, and 3) engage trainees in clinical sustainability quality improvement projects.

Curricular Design: We chose a lecture format developed with input from faculty and other content experts to streamline integration into our existing didactic structure. Topics included “Climate Change, Health, and Equity”, “Climate Medicine; from Practice to Policy”, “Healthcare Sustainability”, and “Climate Medicine: Extreme Heat and Wildfires”. Feedback from attendees was collected and aggregated via MedHub.

Impact/Effectiveness: Feedback was positive, and many felt that the lecture series addressed a gap in training, though some requested more clinically applicable content. Following the lecture series, EM residents formed a Green Team which introduced sustainability practices to our university hospital emergency department (ED). At our county hospital ED, residents implemented an instrument-recycling program. After one month, 17% of instruments were recycled, improving to 62% in month two. These outcomes suggest success in motivating residents to participate in sustainable clinical practices. We plan to expand to a 2-year curriculum focusing on the health impacts of climate change while continuing to emphasize experiential learning with climate sustainability projects.

41 “Rapid Recall in Resuscitation”

Taylor Ingram, Lindsey Picard, Julie Pasternack, Maia Dorsett, Kate Kokanovich, Fabiola Enriquez, Rachel Gartland, Joseph Pereira, Linda Spillane

Introduction/ Background: A physician’s ability to order resuscitation medications proficiently is critical to patient care. Recall, pocket references and phone applications, and support from clinical pharmacists are common practice. Faculty identified gaps in residents’ ability to order such medications or use available resources efficiently without pharmacist support.

Educational Objectives: Simulate a high-pressure environment to evaluate residents’ ability to order commonly used resuscitation medications. Identify gaps in knowledge or ability and allow for direct formative feedback. Use the identified gaps to guide curricular change.

Curricular Design: A scenario-based oral exam was developed in response to a faculty survey in which critical resuscitation medications were identified. The quiz was reviewed by physicians and pharmacists for accuracy. Faculty administered the quiz to individual residents from all post-graduate years during the program’s annual comprehensive assessment. Residents had 20 minutes to provide medication names, doses, and administration

parameters in 16 resuscitation scenarios. Learners were instructed to bring pocket references and phone applications utilized in clinical practice and were allowed to use only these resources during the quiz. A score was provided based on number of correct answers. Faculty discussed the final score, any incorrect answers, and provided individual feedback.

Impact/Effectiveness: Quiz results demonstrated scores trended higher with each year of training, though within all PGY classes there remained outliers. The results informed faculty of individual resident practice or knowledge gaps and allowed for feedback, with themes including familiarity with resources, need for review of less commonly encountered scenarios, and confidence. Curricular adjustments included simulations with residents requiring further intervention and permanent implementation of a similar quiz in future assessments for repetitive practice.

42 Global Health Conference – Simulation Increases Knowledge and Learner Satisfaction Amongst Interprofessional Teams

Abigail Alorda, Taylor Cesarz, Jonathan Littell, Kiana Hashemi, Rifa Ali, Marianne Sia, Anela Carrazana, Stephanie Cohen, Shayne Gue

Introduction: Given technological advancements and growing research supporting its widespread use, medical simulation is becoming integrated across the field of medical education. Simulation provides hands-on experience in interprofessional teamwork for learners of all levels, as well as improves clinical reasoning skills. Despite widespread implementation, educational gaps persist. One identified gap in medical student education is exposure to natural disaster management. Simulation offers one solution in a risk-free, psychologically safe environment.

Objective: To evaluate the impact of a post-hurricane disaster simulation scenario on medical knowledge, teamwork, and clinical skills in a group of interprofessional learners.

Curricular Design: The simulation was conducted in the Clinical Skills and Simulation Center at the University of Central Florida College of Medicine. Learners in the simulation included medical students, graduate students, undergraduate students, and nursing students. After triaging as one large group, learners were split into two groups to complete evaluation and management of two patients from the disaster scene.

Impact: A total of 27 learners participated in the post-hurricane disaster simulation. Results of the pre- and post-test revealed statistically significant increases for

each medical knowledge item (36.4% to 78.6%, $p < 0.001$) regarding START Triage. Additionally, learners reported increased levels of agreement with statements regarding the importance of working as part of interprofessional teams, the importance of disaster medicine, and the effectiveness of simulation exercises as an education tool for disaster preparedness. Therefore, we concluded that medical simulations for disaster management, such as the one conducted in this study, allow learners to enhance their critical thinking, develop hands-on clinical skills, and gain confidence as they better understand real-life disaster scenarios in interprofessional settings.



Figure 1.



Figure 2.