

UC Irvine

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

Title

Bridging Training to Practice: How Simulation Shapes Procedural Confidence in EM Graduates

Permalink

<https://escholarship.org/uc/item/8hz6f2vn>

Journal

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

ISSN

1936-900X

Authors

Stankewicz, Holly
Mittelman, Andrew
Quazi, Shaila

Publication Date

2026-03-26

DOI

10.5811/westjem.64157

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/>

of residents and advanced practice providers. Differences emerged across groups: residents emphasized job search skills, whereas attendings highlighted interhospital transfers. Open-ended responses reflected anxiety regarding solo coverage, legal responsibility, and unfamiliar systems.

Conclusions: This needs assessment demonstrates strong support for a structured, senior resident-focused TTP curriculum in EM. Respondents favored interactive, practice-relevant instruction targeting legal, supervisory, and administrative competencies. These findings provide a foundation for curriculum design and underscore the importance of tailoring training to prepare EM residents for the demands of independent practice.

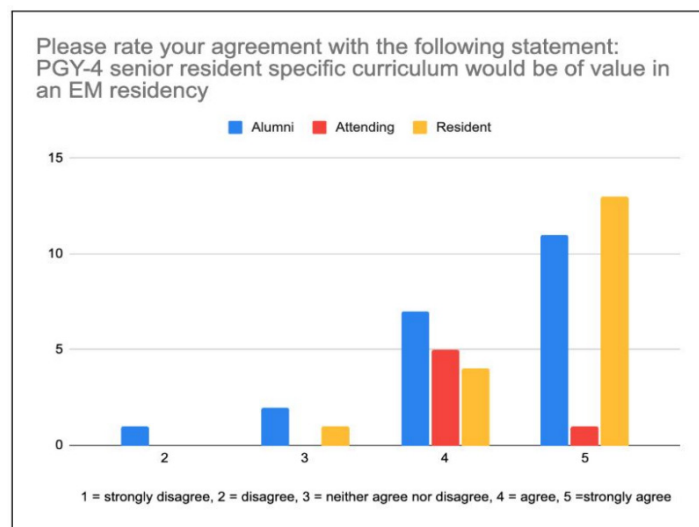
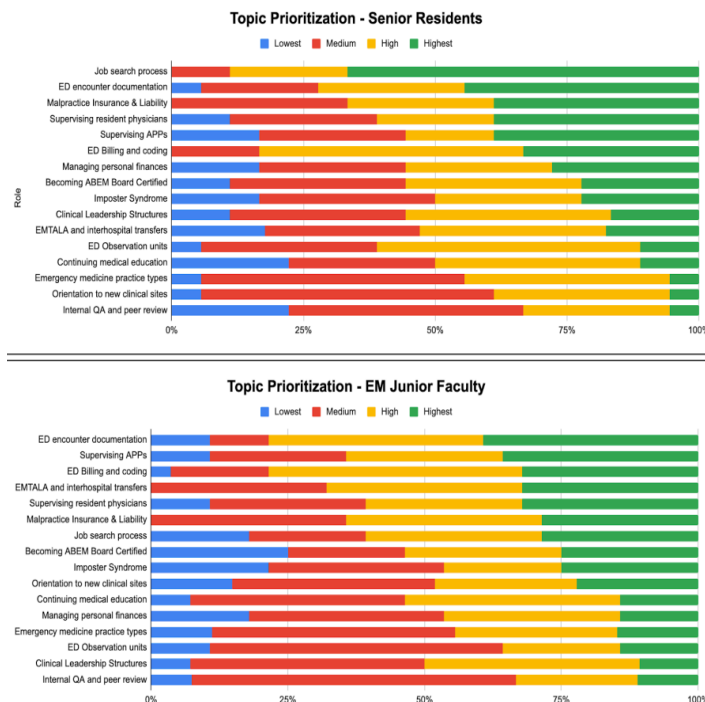


Figure 2: Overall agreement in value of PGY 4 curriculum

60 Bridging Training to Practice: How Simulation Shapes Procedural Confidence in EM Graduates

Holly Stankewicz, Andrew Mittelman, Shaila Quazi

Background: The ACGME defines procedural competency using minimum numbers of index procedures, but clinical opportunities to perform these procedures are inconsistent. Simulation-based training has been increasingly used to address experiential gaps, though resources and curricula vary widely, and standardized approaches are limited.

Objective: To examine the self-reported effect of simulation-based training on Emergency Medicine (EM) residents' procedural confidence at or soon after graduation.

Methods: A 25-item survey was administered in 2024–2025 to senior residents and recent graduates from a convenience sample of U.S. residency programs. Question items targeted the impact of simulation on each of the ACGME procedures as well as procedural training as a whole.

Results: Responses were received from 175 residents across 22 programs, representing all U.S. regions. All residents reported presence of simulation-based procedural training and 49% rated it "critical" to procedural proficiency. Greater simulation resources were associated with higher confidence in large-bore chest tube placement and cardiac pacing. Minimum requirements for cricothyrotomy (87%), pericardiocentesis (85%), lateral canthotomy (67%), and cardiac pacing (46%) would not have been met without simulation. In multilevel logistic regression models predicting composite confidence ($\geq 70\%$ of procedures rated competent), structured simulation curriculum (OR 1.89) and simulation faculty (OR 1.06) were positively associated with confidence. Procedural task trainers had the strongest impact, significantly increasing the odds of achieving procedural competence (OR 6.88).

Conclusion: Simulation is a high-resource strategy for EM procedural skill acquisition, considered essential or critical by many respondents to bridge opportunity gaps. These findings emphasize the importance of consistent, well-resourced simulation training to ensure all trainees graduate prepared for safe, independent practice.

61 Rotation Rigor and Resident Readiness: The Effect of Rotation Difficulty on EM In-Training Exam Performance

Abagayle Bierowski, Erin Hoag, Kelly Kehm, Peter Tomaselli, Jiten Patel, Kathleen Cruz, Cody Andreoni, Madeline Dwyer, Danielle Melisiotis

Background: The notion that demanding rotations immediately prior to the In-Training Examination (ITE) may affect performance is largely anecdotal. While one surgical study