UC Irvine

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

Title

National Survey of Emergency Medicine Residency Program Simulation Resources

Permalink

https://escholarship.org/uc/item/1x80p7m8

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 26(3.1)

ISSN

1936-900X

Authors

Berger, Max
Chung, Arlene
Ackil, Daniel
et al.

Publication Date

2025-06-16

DOI

10.5811/westjem.48625

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

and using checklists have been tested to boost observer engagement, yet outcomes are mixed, especially in balancing technical skills with clinical decision-making. To address this, we introduce a novel Bingo card tool that uses game theory to increase observer engagement. By tracking clinical decisions during simulations and adding a competitive element, the Bingo card aims to keep observers attentive and engaged. This approach, not yet explored in literature, seeks to enhance satisfaction, knowledge retention, and teamwork in simulation learning.

Objectives: This tool aims to make observation more engaging by assigning observers an active, challenging task. Primary outcomes include self-reported engagement, learning, and satisfaction during observation.

Curricular Design: Over one month, two simulation directors and a fellow piloted the Bingo card for mandatory simulations. This 5x5 grid prompts observers to track specific participant actions. Sessions at Orlando Health's Graduate Medical Education Simulation Center included three scenarios with residents from PGY-1 to PGY-3. Each scenario had two active participants, while the remaining four observed in roles of nurse, note taker, or Bingo player. Each resident took on the Bingo role once. Standard debriefs and post-simulation Likert-scale surveys assessed observer experiences.

Impact: This Bingo tool was piloted across three sessions with sixteen residents completing surveys on focus, enjoyment, engagement, and distraction. Most residents reported that the tool improved focus, enjoyment, and engagement, with minimal distraction and a preference for its use. Figures and tables are attached.

Figure 1. Survey questions.

Survey questions included the following and were rated on a Likert Scale from 1-7.
1. The bingo card tool helped me stay focused/engaged during the observation. (Focused)
2. Observing the simulation scenario while using the bingo card made the process more enjoyable. (Enjoyable)
3. The bingo card helped me notice things I might have otherwise missed. (Notice)
4. I found the bingo card distracting to the overall observation experience. (Distracting)
5. I would prefer to use a bingo card in future observation tasks. (Preference)

Table 1. Bingo perspective survey averages.

Survey questions included the following and were rated on a Likert Scale from 1-7 and correlate to the questions listed in Figure 1. The n was 16, with average Likert scale results as below

Bingo Perspective Survey Averages				
Focused	Enjoyable	Notice	Distracting	Preference
6.625	6.3125	6.625	3.625	6.25

Survey questions included the following and were rated on a Likert Scale from 1-7 and correlate to the questions listed in Figure 1. The n was 16, with average Likert scale results as below

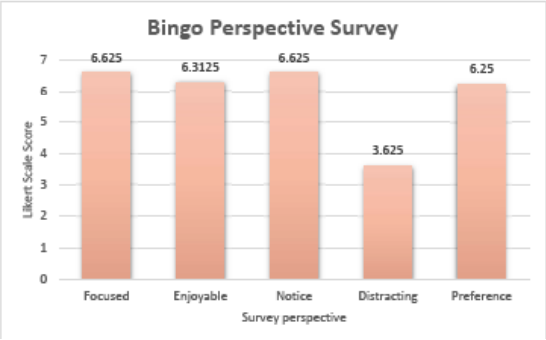

Figure 2. Bingo perspective survey averages graph.

49 National Survey of Emergency Medicine Residency Program Simulation Resources

Max Berger, Arlene Chung, Daniel Ackil, Ryan Clark, William Soares, Jaime Jordan

Background: The American Board of Emergency Medicine (ABEM)'s new Certifying Exam features simulation-based assessment.The current resources available to prepare residents to successfully pass this high stakes exam is unknown.

Objective: We sought to assess the current state of simulation resources in EM residency programs.

Methods: This was a cross-sectional survey study of residency or simulation leadership at ACGME accredited EM programs. We developed and administered an online survey consisting of multiple-choice items. The survey was piloted prior to use. To maximize response rate and minimize guessing, we did not require participants to complete all survey items. We collected data from August-October 2024. We calculated descriptive statistics.

Results: We identified contact information for residency or simulation leadership from 287 programs and 154 programs completed the survey (54%). Table 1 shows characteristics of participating programs. 80% of respondents were from PGY1-3 programs and 20% from PGY1-4 programs. Table 2 reports program simulation resources and usage. 40% of respondents reported that their department has a simulation division and 81% reported having a simulation director. 97% of programs reported they had access to a dedicated simulation center. 85% reported that it was "extremely easy" or "somewhat easy" to access simulation center resources, while 15% reported that it was "neutral," "somewhat difficult," or "extremely difficult." 16% of programs reported having to pay for simulation center resources, and of those, 26% stated that this limits simulation in their curriculum. There was a wide range of reported average yearly hours of simulation education per resident (mean 47.70 hours, SD 38.45).

Conclusions: While most participating EM residency programs have access to simulation resources, not all programs have robust resources, which may lead to inequities in preparing trainees for the new ABEM Certifying Exam.

Table 1. Survey respondent program demographics.

Residency program format	n (%)
PGY 1-3	122/153 (80%)
PGY 1-4	31/153 (30%)
Does your EM Department/Division have a Simulation Division?	
Yes	61/153 (40%)
No	92/153 (60%)
Does your EM Department/Division have a Simulation Director?	
Yes	124/153 (81%)
No	29/153 (19%)
Which of the following best describes your primary clinical site?	
County	20/151 (13%)
University	58/151 (38%)
Community	66/151 (44%)
Military	2/151 (1%)
Other	5/151 (3%)
Which of the following best describes your primary clinical site?	
Urban	89/153 (58%)
Suburban	51/153 (33%)
Rural	11/153 (7%)
Other	2/153 (1%)
What region is your residency program located in?	
West	27/153 (18%)
Midwest	40/153 (26%)
Northeast	35/153 (23%)
South	50/153 (33%)
Puerto Rico	1/153 (1%)

50 Characteristics of Soaped EM Residents

Anthony Sielicki, James Morris, Brian Milman, Miriam Kulkarni, Andy Little

Background: Between 2021-2023 Matches in Emergency Medicine (EM), there were 787 unfilled positions which were largely filled in the Supplemental Offer and Acceptance Program (SOAP).

Objectives: We sought to characterize rates of attrition of SOAPed EM residents, as well as their general guidance needs based on the ACGME milestones compared to residents who matched into EM in the main Match.

Methods: This was a mixed-methods study. A survey was distributed to program leaders in EM while at CORD's Academic Assembly and then via the CORD listserv. Program leaders were asked about the number of SOAPed residents in their program, the number who have left or plan to leave, and the typical amount of support and guidance required for each ACGME milestone.

Results: We collected 56 responses from program leaders, who reported having 289 SOAPed residents in their programs over the past 3 years (mean 5.25, std 3.99), representing 36.7% of all SOAPed EM residents from 2021-2023. 20 were reported to have left or planned to leave their program (6.9%). Table 1 displays the typical amount of required guidance for each milestone.

Conclusions: Within this sample, the attrition rate of SOAPed residents is (6.9%). SOAPed EM residents require more guidance with emergency stabilization and multitasking than their peers.

Table 1. Guidance for SOARed EM Residents compared to categorically matched peers.

Milestone	Much more	Somewhat more	Same	Somewhat less	Much less
Emergency Stabilization	16.7%	35.2%	40.7%	7.4%	0
Focused history and exam	9.3%	29.6%	53.7%	5.6%	1.8%
Selection of diagnostic studies	9.6%	32.7%	50%	7.7%	0
Appropriate diagnosis	7.4%	33.3%	55.6%	3.7%	0
Pharmacotherapy	5.8%	26.9%	63.5%	3.8%	0
Reassess and disposition	5.6%	31.5%	55.6%	7.4%	0
Multi-tasking and task-switching	11.3%	35.8%	47.2%	5.7%	0
Procedural skills	11.1%	24.1%	50%	14.8%	0
Medical knowledge	15.1%	22.6%	50.9%	11.3%	0
Professionalism	3.7%	7.4%	74.1%	13%	1.8%
Patient and family communication	1.9%	9.4%	79.2%	7.5%	1.9%
Interpersonal and team communication	3.7%	11.1%	74.1%	9.3%	1.9%
Self-awareness and well being	5.6%	16.7%	66.7%	11.1%	0