

UC Irvine

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

Title

Measurement of the weight of academic performance on the residency interview and ranking

Permalink

<https://escholarship.org/uc/item/0wb7q8hc>

Journal

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

ISSN

1936-900X

Authors

Kravitz, Joel

Neyman, Greg

Publication Date

2024-03-24

DOI

10.5811/westjem.20440

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/>

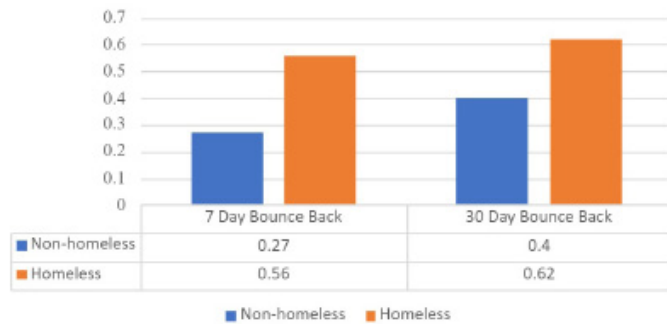


Figure. Comparison of homeless and non homeless patient's bounce back rates.

55 Measurement of the weight of academic performance on the residency interview and ranking

Joel Kravitz, Greg Neyman

Background: Educators agree that no one factor predicts a resident's chance of success in residency and beyond, and academic record is likely the strongest biasing factor in residency selection, though the exact magnitude of its weight is unknown.

Objective: To determine, with respect to medical students applying to residency in emergency medicine, to what degree prior knowledge of the candidate's academic record affects their ranking.

Methods: We undertook a prospective observational study, analyzing ranking scores of all interviewers of applicants to our East Coast academic EM residency program in the 2022-2023 interview cycle. Each applicant underwent 4 separate interviews, but (randomly) one of the three interviewers was blinded to their academic record. Though the applicants were interviewed, it was the interviewers who were the true subjects, and IRB approval was obtained. Applicants were then scored on a ten-point scale and data was stored in a secure database. These scores were then analyzed for inter-observer agreement. A difference of an interview rating score of 10% or greater was considered significant. Data was analyzed using a Student's T-test and Mann-Whitney test to compare data.

Results: 176 interviews were included for analysis. Interview scores between blinded and unblinded interviewers were significant ($p < 0.00001$). When the differences were spread out via histogram, the discordances were significant at 1.5 points ($p < 0.0001$) and statistically significantly related to percentile scoring on USMLE or COMLEX. The candidates with the highest blind/unblind discordances were associated with more failures in medical school ($p < 0.03$) and on standardized exams like the USMLE or COMLEX ($p < 0.07$) for poor academic performers.

Conclusions: This data would suggest academic performance accounts for at minimum a 15% jump or drop in rank score when assessing final applicant rank. Expanding this type of study may give insight into both interview biases.

56 Can you do it FAST-ER?: Focused Assessment with Sonography in Trauma Skills During Ultrasound Rotations and the Development of Competency

Gabriel Ceceñas Salas, Jeremiah Ojha, Emily Hillman, Monica Gaddis, Andrew Balk, Kevin O'Rourke, Matthew Cook

Background: The focused assessment with sonography in trauma (FAST) exam is part of trauma evaluation and is sensitive and specific in the identification of free intraperitoneal fluid. Findings can change patient management. EM residents are required by the RRC to complete 150 ultrasound (US) exams to graduate; however, there is no specified number of FAST exams required and no requirement for a dedicated US block. Competency is often assumed based on rotation completion.

Objective: To evaluate FAST exam competency outcomes of our 4-week ED US rotation for EM PGY-1 residents.

Methods: This was a pre-post study at a single institution. We assessed 12 PGY-1 EM residents' FAST exam competency using a previously published, validated objective assessment tool consisting of a task-specific checklist (TSC) and global rating scale (GRS). Residents were assessed during residency orientation, at the beginning, and end of their required 4-week US rotation. Three US fellowship-trained faculty performed the one-on-one assessments. Scores of 18/24 (TSC) and 27/40 (GRS) were used as a measure of competency.

Results: Post-rotation performance had a significant improvement when measured against pre-rotation and baseline scores (figures 1 and 2). A repeated measures ANOVA was used to compare the TSC and GRS scores from orientation, pre-rotation, and post-rotation. There were statistically significant differences in the scores at each measure (TSC: $F=63.169$, $p < 0.001$; GRS: $F=38.87$, $p < 0.001$). Multiple comparisons with Bonferroni Correction confirmed the significance of each measure (TSC: $p < 0.001$; GRS: $p \leq 0.002$).

Discussion: All residents had significant improvement in GRS and TSC scores when compared with baseline, and all had improvement in GRS or TSC when comparing pre-US rotation and post-US rotation. This study demonstrated the feasibility of incorporating a FAST exam assessment into an EM residency ultrasound curriculum to evaluate learning outcomes and curricular effectiveness.