68 The Effect of Blinding Faculty Reviewers on Increasing Diversity in Residency Recruitment

Dominique Hill

Background: The medical field has historically lacked diversity, with residency recruitment influenced by implicit bias. In 2023, the Association of American Medical Colleges reported that only 7.3% of MD EM residents were African American, compared with 64.4% Caucasian, and 41.9% of EM residents (MD and DO) identified as female.

Objectives: To evaluate the impact of blinding faculty reviewers to applicant race and gender on the diversity of medical students interviewed and matched at our EM residency program.

Methods: A retrospective observational study was conducted using Electronic Residency Application Service (ERAS) data from applicants to the Trinity Health Livonia EM residency program from 2018–2025. Demographics of medical students who interviewed and matched before and after the implementation of faculty blinding in September 2021 were compared. Applications missing race and gender were excluded from analysis.

Results: Out of 701 applicants that were interviewed, 41% self-identified as female and 40.5% as non-white. Following implementation of reviewer blinding, there was a statistically significant increase in the proportion of interviewed applicants who were female (p=0.0003), non-white (p=0.0001), and female or non-white combined (p=0.0004). Among the 45 matched residents (42% female, 57% male; 59% non-white, 40% white), differences were not statistically significant for female (p=0.3975), non-white (p=0.1240), or female or non-white combined (p=0.2241). 141 applicants were excluded due to missing demographic information.

Conclusions: Blinding faculty reviewers to race and gender was associated with a statistically significant increase in diversity among interviewed but not matched medical students. The absence of significant findings for matched data may reflect the limited sample size and positions filled through the Supplemental Offer and Acceptance Program. Future research from multiple programs is needed to determine if there is a correlation between blinding faculty and improving diversity in EM residencies.

Image 1. Year-to-year comparative line charts of minority groups for interviewed medical students in proportions

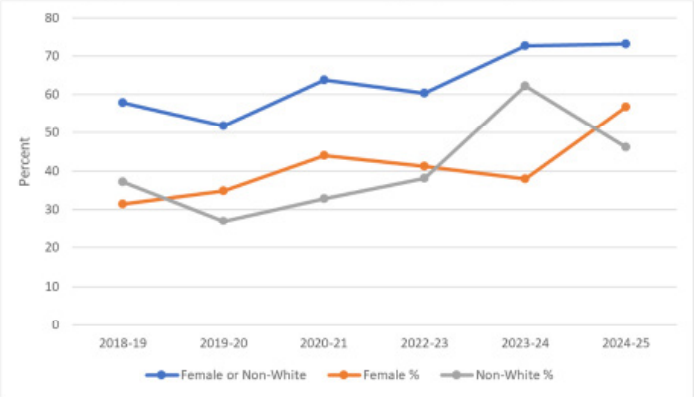
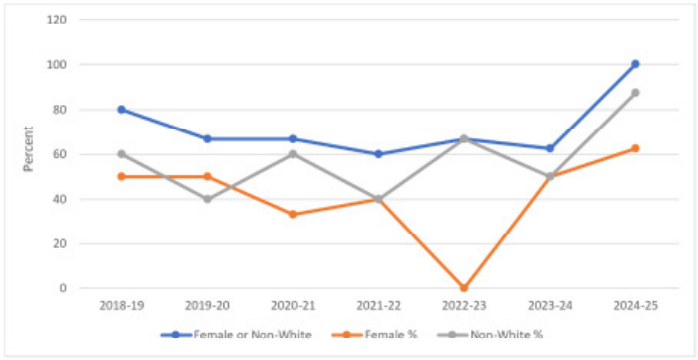


Image 2. Year-to-year comparative line charts of minority groups for matched medical students in proportions



69 Resident Teaching Confidence: Insights from a Foundations of Emergency Medicine Survey

Sydney Miller, Michael Sobin, Frances Rusnack, Kevin Schlicksup, Kristen Moore

Background: Resident-as-teacher (RAT) initiatives are increasingly emphasized in EM residencies. Yet the extent to which residents feel prepared to teach and supervise junior learners and advanced practice providers (APPs) in the ED remains unclear.

Objective: To address this gap, we developed a learner-focused survey assessing residents' confidence in didactic teaching and clinical supervision. We hypothesized that residents would report insufficient confidence in these skills, suggesting unmet needs in RAT training.

Methods: In June 2024, Foundations of Emergency Medicine (FoEM) administered an online survey with piloted Likert-scale and multiple choice questions to program learners. Those who identified as EM resident physicians received questions regarding confidence in teaching and supervision. Descriptive statistics were reported.

Results: The FoEM learner survey collected 929 responses (15.9% response rate), with 791 representing EM resident physicians across 123 programs (PGY-1: 292; PGY-2: 239; PGY-3: 223; PGY-4+: 37). Residents reported moderate confidence across most teaching domains, including delivering lectures (46.5% extremely/quite confident vs 20.6% not at all/slightly confident), teaching junior learners in classrooms (47.9% vs 15.9%) and on shift (55.4% vs 11.8%), supervising junior learners (48.2% vs 17.1%), and supervising procedures performed by junior learners (52.3% vs 15.3%, Fig. 1). Confidence was lowest

for supervising APPs (31.6% vs 35.9%). PGY-1s reported lower confidence across all domains (Fig. 2). Confidence did not differ by anticipated post-graduation practice setting.

Conclusion: EM residents report overall confidence in teaching and supervising junior learners, which increases with experience. However, confidence is notably lower for APP supervision. Further research should explore strategies to optimize early educator development and improve confidence in supervising APPs.

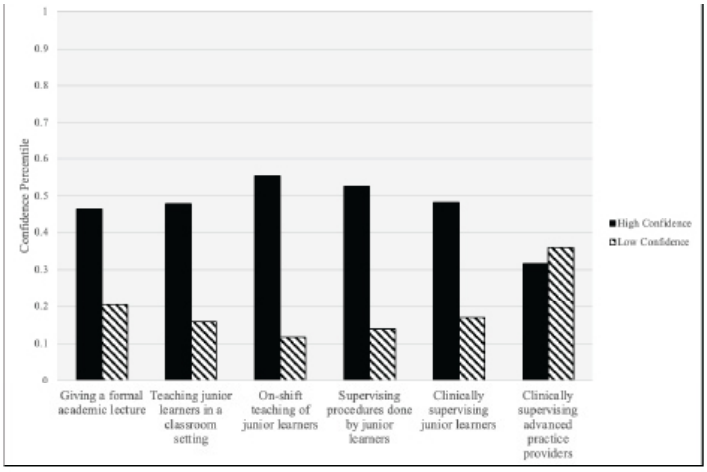


Figure 1. Percent confidence of residents (N=791) as medical educators and supervisors. Confidence is broken down by high confidence (extremely-quite confident) versus low confidence (slightly-not at all confident).

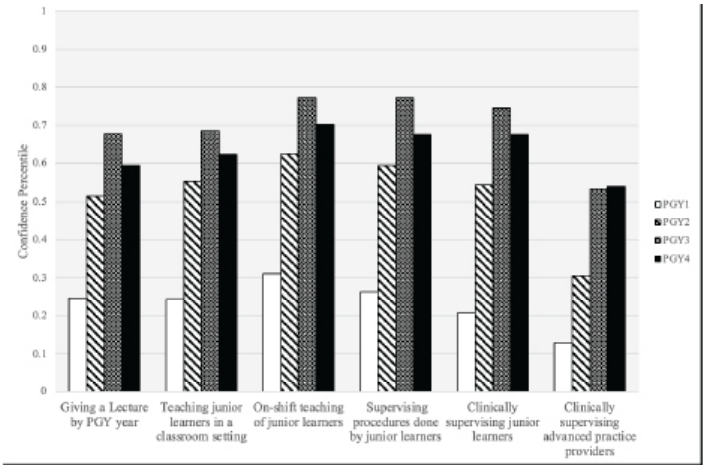


Figure 2. Percent high confidence (extremely-quite confident) of residents as medical educators and supervisors by PGY year (PGY-1 N=292, PGY-2 N=239, PGY-3 N=223, PGY-4 N=37).

70 High-Fidelity Cadaveric Simulation Model for Lateral Canthotomy and Cantholysis

Alexander Bleau, Jennifer Campoli, Susan Wojcik, Conor Young, Kayla Dueland-Kuhn

Background: Lateral canthotomy and cantholysis (LCC) is a vision-saving emergency procedure used to treat orbital compartment syndrome (OCS), often caused by retrobulbar hematoma. Despite its importance, many EM trainees lack confidence in performing LCC due to the rarity of clinical exposure and limitations in existing simulation models.

Objective: To evaluate a cadaveric model that simulates retrobulbar hematoma for lateral canthotomy education in EM trainees.

Methods: Using a technique adapted from Chin et al. (2020, Int Forum Allergy Rhinol.), proptosis was simulated in fresh-frozen cadavers. This prospective observational study used pre- and post-intervention Likert scale surveys to evaluate EM residents' LCC procedural confidence and perceptions during annual procedure labs (2022-2023) at a single academic center. Survey data was analyzed with descriptive statistics and independent statistical testing. Outcomes included prior procedural experience, self-reported procedural confidence, and perceived model fidelity.

Results: 29 participants completed the pre-intervention survey and 25 completed the post-intervention survey. Most participants were PGY-3 residents (66%), with 55% reporting having never performed the procedure. The mean confidence among participants increased from 2.79 ± 1.42 to 4.32 ± 0.99 with a mean difference of 1.53 ± 0.34, $p<0.001$, 95%CI 0.85-2.21. The average rated fidelity of the model without OCS simulation was 2.76 ± 1.05 and the model with OCS simulation was 4.21 ± 0.76 with a mean difference of 1.44 ± 1.12, $p<0.001$, 95%CI 0.977-1.90.

Conclusion: To our knowledge, this is the first study to evaluate the educational impact of a cadaver-based simulation model incorporating a simulated retrobulbar hematoma for EM residents performing LCC. By providing both anatomic realism and pathophysiologic fidelity, this model uniquely improves learner confidence and reinforces the value of realistic simulation for high-stakes procedures like LCC.

71 Individualized Learning Plans for Senior Medical Students Pursuing Emergency Medicine Residency

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Background: Individualized learning plans (ILPs) identify learner strengths and weaknesses, and develop personalized action plans with faculty input. In 2024-5, we piloted ILPs for students enrolled in the emergency medicine (EM) TTR course. Students completed an individualized self-assessment (ISA), then developed an ILP with EM faculty. We surveyed senior medical students completing the EM TTR course regarding effectiveness and perception of ILPs.

Objectives: We hypothesize the use of ILPs for MS4s can guide their study plans and areas of improvement at the start