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22 Peer Power: Near-Peer Led Content Review as a Catalyst for Improved NBME Shelf Exam Scores

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Background: The NBME Advanced Clinical Examination (ACE) in EM is a critical component of assessment in EM education. Scores on this exam are compared with a nationally representative cohort and the material is traditionally more challenging than on other NBME “shelf” clinical exams. Previous literature has shown that both resident-led and structured curricula have improved shelf exam scores in other fields; however, there is scant literature describing interventions to improve EM-ACE scores. This project investigates the impact of a near-peer-run monthly review session on NBME EM-ACE performance. **Objective:** To assess whether a study group intervention improves ACE scores amongst medical students on an EM rotation.

Methods: A pre-and post-intervention study was conducted with 20 cohorts of EM clerkship students from August 2022 to August 2024. The intervention consisted of a single near-peer-led study group session during a 4-week clerkship. Material taught in this session was targeted towards content that was covered less during standard clerkship curriculum. Exam averages, highest, and lowest scores were collected from 10 cohorts before and 10 after the intervention.

Results: In the pre-intervention group (n=134), the mean ACE score was 77 (SD 7, IQR 8.25). In the post-intervention group (n=117), the mean ACE score was 80 (SD 7, IQR 10). There was a statistically significant increase in post-intervention scores ($p = 0.014$). This difference exceeds the difference expected based on analysis from administration comparing graded component scores from pandemic-induced disruption and conversion to pass-fail grading.

Discussion: The current EM-ACE exam is targeted at final-year medical students and is commensurately challenging. Pre-intervention, our team had noted a trend toward lower scores in students taking the clerkship earlier

in their training along with temporal trends associated with pandemic-related disruptions and changing grade schemas. The intervention significantly improved scores in all learners, indicating its potential as an effective educational strategy. More research is needed to assess long-term benefits and broader applicability.

Conclusion: Structured study groups can boost NBME Shelf Exam performance, offering a useful tool for medical educators.

23 Differences in Language Used to Describe Racial Groups in Emergency Medicine Standardized Letter of Evaluation

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Introduction: According to program directors in Emergency Medicine, the Standardized Letter of Evaluation (SLOE) is the most important component of the emergency medicine residency application. Understanding possible biases in SLOE language is critical for an equitable review process. Past studies have shown differences in the way medical students are described in narrative evaluations by race and gender. This is the first study to evaluate narrative linguistic differences in applicant SLOEs by race.

Methods: This is a narrative analysis of all US MD and DO SLOEs from applicants to the study institution in the 2022 application cycle. We used Linguistic Inquiry and Word Count (LIWC) to complete two analyses. Analysis One used frequency of words within 19 categories to evaluate differences between underrepresented minorities in medicine (URiM) and non-URiM applicants and within racial subgroups. Analysis two used LIWC to evaluate dichotomous use of 21 key words in these same groups. Linear Mixed Models (LMMs) were performed for each of the outcomes to evaluate for associations between URM/non-URM status or racial subgroup and each outcome and to account for correlation between a residents’ SLOEs.

Results: Of the 809 unique applicants, 18.3% identified as URiM, 57.5% identified as White, 17.4% identified as Asian, 10% identified as Latinx, 6.3% identified as Black. The analysis revealed applicants who are Black contained on average 0.537 (SE=0.154, Bonferroni-adjusted p-value=0.010) percentage points more communal words when compared to White applicant SLOEs. URiM applicants had 0.322 percentage points more communal words (SE=0.102, Bonferroni-adjusted p-value=0.030) compared to Non-URiM SLOEs.

Conclusion: Applicants who were URiM or Black were more likely to be described with empathic and communal words than their peers. Our study demonstrates that URM students are more likely to be described with words which have been associated with less hireability and could represent coded language within evaluations that impact advancement

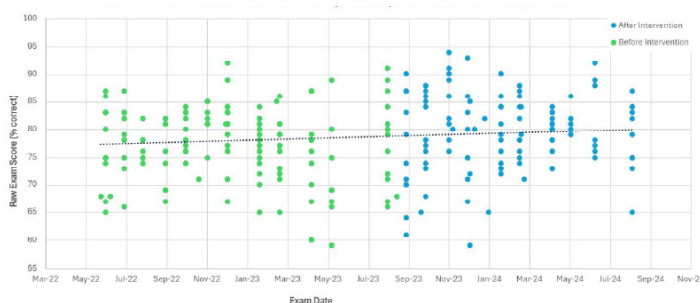


Figure 1. Near-peer led content review as a catalyst for improved Nbmef Shelf Exam Scores