

8 Assessing Knowledge and Preparedness of LGBTQ Healthcare Needs Among Future Physicians

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Background: Medical education must evolve to address the needs of the growing LGBTQ population which is affected by social determinants of health. However, LGBTQ-focused training is limited. Physicians report feeling underprepared to treat LGBTQ patients, contributing to poorer health outcomes. Deficits in inclusive care may begin early in medical school training, yet most research focuses on residents or attendings, with limited data on medical students over the last decade.

Objective: We assessed if gaps in LGBTQ-inclusive healthcare education begins in medical school, hypothesizing lower student preparedness for caring for LGBTQ versus non-LGBTQ patients. We also aimed to identify specific training needs and barriers to curricular integration to inform future curriculum development.

Methods: A single-institution, quantitative, cross-sectional survey was administered to 998 first- through fourth-year medical students at the Arizona College of Osteopathic Medicine in 2023. An anonymous online survey assessed preparedness, curricular exposure, and barriers. We received 126 responses (12.6% rate). Data was analyzed using Chi-square and McNemar tests ($p < 0.05$).

Results: Students reported significantly lower comfort performing physical exams ($p < 0.001$) and treating nonspecific complaints such as cough/back pain for LGBTQ patients compared to non-LGBTQ patients ($p < 0.001$). Most students (91.2%) estimated receiving less than 5 hours of annual LGBTQ content and 72% felt more hours were necessary. Barriers identified included limited faculty expertise, time constraints, and perceived low institutional prioritization.

Conclusion: LGBTQ-related educational gaps appear early in medical training, with students reporting lower comfort and inadequate curricular exposure. Despite limitations of sample size and response bias, findings support expanding LGBTQ-inclusive curricula to improve preparedness and promote equitable care. This work is currently being expanded to include additional medical schools for broader assessment.

9 USMLE Step 2 Clinical Knowledge as a Predictor of Emergency Medicine In-Training Examination Performance: A Single-Institution, Ten-Year Retrospective Cohort Study

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Background: With the transition of USMLE Step 1 to pass/fail, Step 2 has emerged as the primary standardized

metric in residency selection. Its relationship to subsequent performance during training, particularly on the American Board of Emergency Medicine (ABEM) In-Training Examination (ITE), remains incompletely defined.

Objective: To evaluate the predictive relationship between Step 2 scores and ITE performance across postgraduate years (PGY) 1–3 in emergency medicine residents.

Methods: This retrospective cohort study included 76 residents at a single institution who graduated between 2013 and 2023. Step 2 scores were correlated with ITE performance across PGY1–3 using Pearson correlations. Linear mixed-effects models with resident ID as a random effect assessed Step 2, PGY year, and their interaction. Simple slope analyses estimated the effect of Step 2 within each PGY year.

Results: Step 2 scores were moderately correlated with ITE scores in PGY1 ($r = 0.40$, $p = 0.0003$) and PGY2 ($r = 0.43$, $p < 0.0001$), but not PGY3 ($r = 0.06$, $p = 0.59$). Mixed-effects modeling demonstrated a significant interaction between Step 2 and PGY year ($p = 0.0172$), with predictive value concentrated in the earlier years of training. Simple slopes confirmed that each 10-point increase in Step 2 predicted a ~2-point increase in ITE score in PGY1 and PGY2, but no effect in PGY3.

Conclusions: Step 2 scores predict ITE performance during the early years of emergency medicine residency but do not forecast long-term success by PGY3. These findings support the use of Step 2 as a tool to identify residents who may require early academic support, while emphasizing the need for complementary assessments to guide progression later in training.

10 Trends in Fellowship Training and Secondary Board Certification Among U.S. Emergency Medicine Residency Leaders

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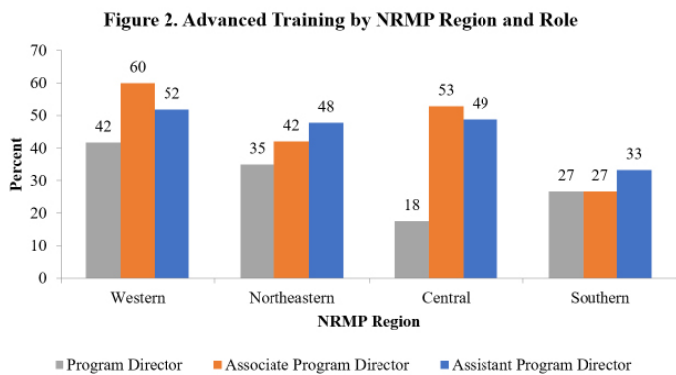
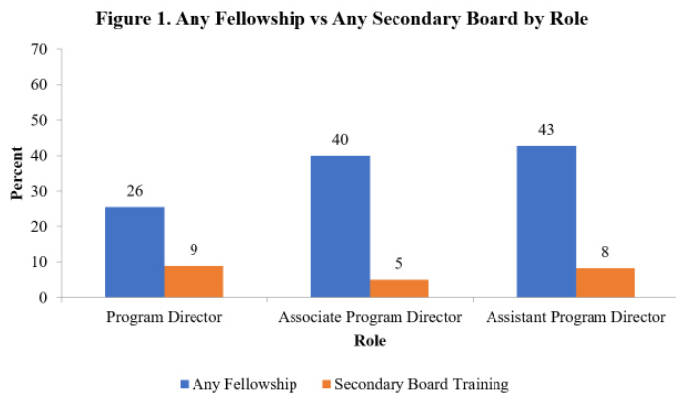
Background: Residency program leaders shape the academic pipeline in emergency medicine (EM). We assessed current demographics and postgraduate training among U.S. EM residency leadership.

Objectives: To update the national prevalence of postgraduate fellowship training and secondary board certification among EM residency leadership, assess regional variation, and compare patterns by role. We hypothesize that medical education fellowship training has increased over the past decade while regional variation persists.

Methods: We conducted a national, cross-sectional survey of all Accreditation Council for Graduate Medical Education (ACGME)-accredited EM residency program leadership via an online, confidential questionnaire. Primary outcomes were the prevalence of any postgraduate fellowship training. Programs were grouped by National Resident Matching Program (NRMP) region.

Results: We received 103 program responses (35.9%). Any fellowship training was reported by 25.5% of Program Directors (PDs), 40.0% of Assistant Program Directors (APDs), and 42.8% of Associate Program Directors (Asst PDs). Any secondary board certification was reported by 8.8% of PDs, 5.0% of APDs, and 8.2% of Asst PDs (Figure 1). Medical education was the most common fellowship (n=54), followed by ultrasound (n=24), toxicology (n=16), simulation (n=15), pediatric EM (n=11), critical care (n=7), EMS (n=5), and administration (n=3). Western programs reported the highest proportions of leaders with either fellowship or secondary certification across roles. (Figure 2).

Conclusions: Postgraduate fellowship and secondary board certification remain uncommon overall among EM residency leaders, but fellowship completion is more prevalent among junior leaders. These data provide an updated, role-specific snapshot to inform leadership development and workforce planning.



11 Impact of Educational Intervention on Question Bank Utilization and Emergency Medicine Residency In-Training Exam Scores

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Background: EM residents must pass the American Board of Emergency Medicine (ABEM) Qualifying Exam

to become board-certified. Typical preparation for this exam includes question banks (Qbanks) and gauging and trending performance on annual In-training Exams (ITE).

Objective: We aimed to assess the impact of an educational intervention on Qbank utilization and ITE scores among EM residents. We hypothesized that the intervention would increase question bank utilization and ITE scores.

Methods: This was a retrospective observational cohort study performed at one urban EM residency program comparing residents' question bank utilization and ITE scores at the end of academic years 2024 and 2025. We applied a multifaceted educational intervention in the 2025 academic

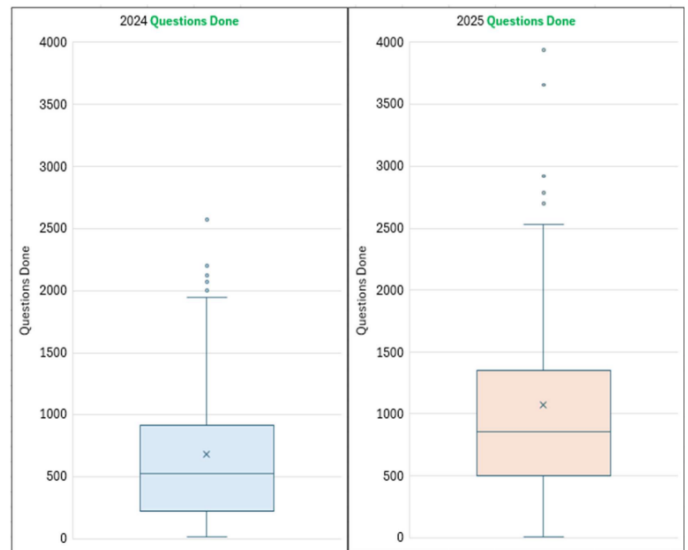


Figure 1. Box and whisker plot of Qbank questions completed by residents by the end of the 2024 academic year (pre-intervention) and 2025 academic year (post-intervention).

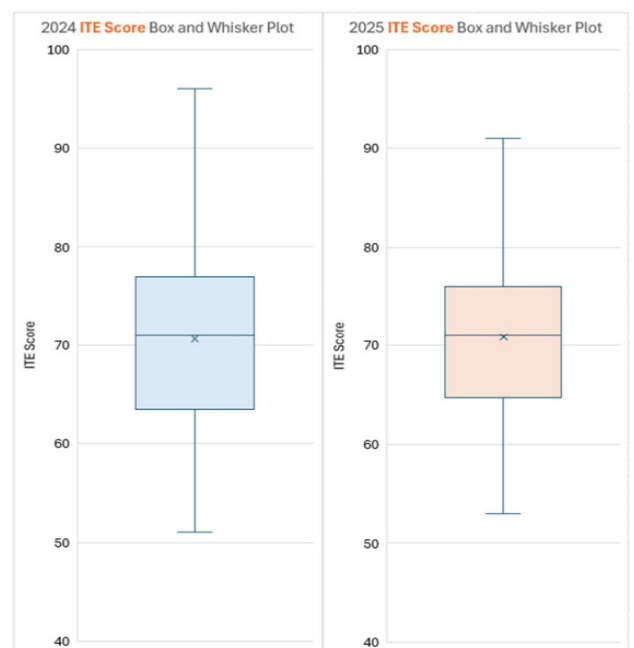


Figure 2. Box and whisker plot of residents' ITE scores in 2024 (pre-intervention) and 2025 (post-intervention).