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Reproducible Mock Certifying Exam Sessions: Improving Emergency Medicine Residents' Confidence and Readiness for Boards

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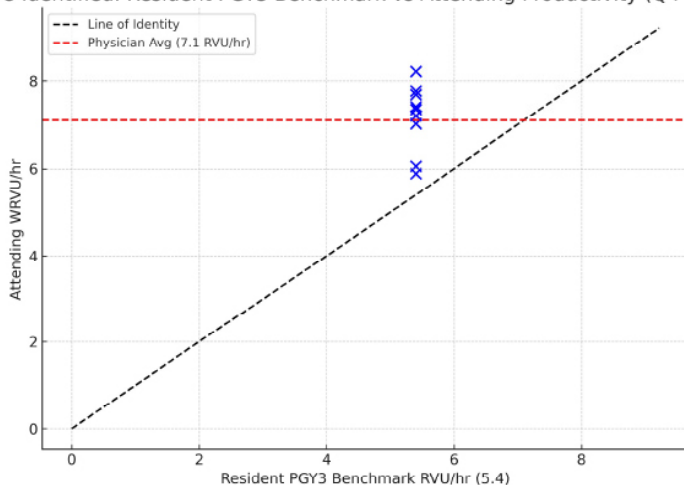
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Methods: This retrospective study analyzed institutional productivity data from 2017–2024. Aggregate PGY3 productivity (2024 benchmark: 5.4 RVU/hr) was obtained from program dashboards. Attending productivity was extracted from departmental billing data, excluding physician assistants and outliers. Nine recent graduates were compared to the PGY3 benchmark and to the physician average (7.1 RVU/hr).

Results: All graduates demonstrated productivity above the PGY3 baseline. Seven of nine achieved performance at or above the physician average. 2 (8.2 and 7.8) exceeded benchmarks by >1.0 RVU/hr, while 2 Bodner (6.1 and 5.9) improved modestly. The average increase across all graduates was +1.9 RVU/hr. Scatter plot analysis demonstrated a consistent upward shift from residency to attending practice.

Conclusions: Resident productivity at graduation appears predictive of early attending efficiency. Most recent graduates surpassed both their PGY3 baseline and departmental average within one year of practice. Productivity metrics may provide valuable benchmarks for competency-based assessment and workforce readiness.

Figure 1: Resident PGY3 Benchmark vs Attending Productivity (Q4 2024)



Innovation Abstracts

1 Reproducible Mock Certifying Exam Sessions: Improving Emergency Medicine Residents' Confidence and Readiness for Boards

James Chiang, Julia Hutchison, Ravi Sumer, Nathan Stuempfig, Kyle Herout

Introduction: ABEM will launch a new Certifying Examination in 2026, replacing the oral boards. The format includes timed stations in clinical care, communication, procedures, and ultrasound. Few published resources exist currently help residencies prepare trainees. To address this gap, we created a high-fidelity mock exam based on ABEM's publicly

released sample videos, case structures, and scoring rubrics.

Objective: Our goals were to replicate the ABEM format for EM residents, assess readiness with aligned rubrics, provide realistic timed simulation exposure, and measure whether familiarity improved performance.

Curricular Design: Faculty reviewed all ABEM sample materials and developed twenty cases with standardized scripts and prompts matching ABEM formatting. Two full-day sessions included four fifteen-minute clinical care cases and six ten-minute stations covering reassessment, communication, conflict management, ultrasound, procedures, and patient-centered care. Actors portrayed patients and family members. Procedural and ultrasound stations used task trainers and structured prompts modeled on ABEM demo videos. Performance was scored using the ABEM 1 to 8 scale, with passing defined as 5.25 or higher. PGY-3 residents were assessed individually; PGY-1/2 residents were assessed in groups but not scored. After completing all stations, residents received individualized debriefing. Pre- and post-surveys measured understanding, confidence in key domains, and overall confidence on a 10-point scale.

Results: Twenty-seven pre-tests and thirteen post-tests were analyzed. Mean overall confidence increased from 6.00 to 7.08. Understanding of the exam format improved notably. Gains in ultrasound, procedures, and communication were modest but positive. Residents valued realistic exposure and requested refinements in logistics and scoring.

Impact/Effectiveness: PGY-3 pass rates improved from 3 of 6 in the first session to 5 of 6 in the second (9 of 12 overall). Residents noted unfamiliarity as a major barrier that improved with practice.

Next Steps: We plan to validate scoring with more examiners, expand to larger cohorts, test sessions in unfamiliar locations, and share case files and scoring tools so other residency programs can easily implement this model.

2 Leveraging Artificial Intelligence to Innovate Scenario Development for the ABEM Certifying Exam

Ravi Sumer

Background: The American Board of Emergency Medicine (ABEM) Certifying Exam, launching in 2026, replaces the traditional oral exam with a hybrid format combining clinical reasoning cases and OSCE-style stations. These cases assess competencies beyond knowledge, including communication, prioritization, and procedural skills, using standardized patients and simulation. Developing realistic, high-stakes scenarios is resource-intensive, requiring expert input, standardized patient training, and iterative validation. Artificial Intelligence (AI) offers a novel approach to streamline scenario creation, ensuring diversity, fidelity, and adaptability while