

58 Lyrics and Leads: Remixing EKG Education Through Music

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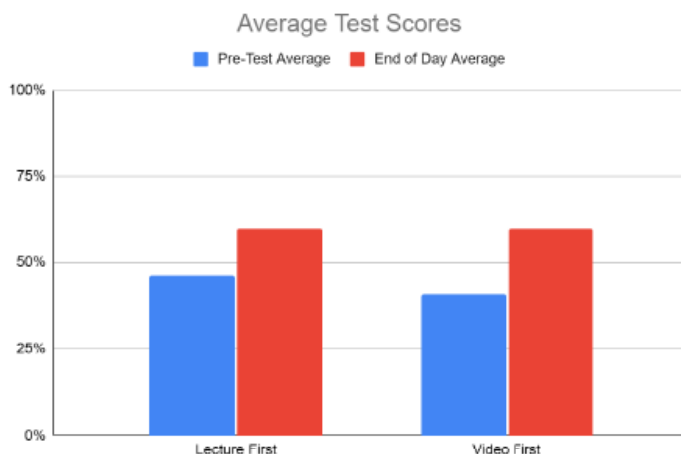
Educational Objectives: To evaluate the effectiveness of using music-video based teaching for improving comprehension and retention of Sgarbossa’s criteria amongst paramedic students and post graduate year 1 (PGY-1) EM residents.

Introduction/Background: Interpreting ECGs to identify myocardial infarction is a critical, yet challenging concept for new learners like paramedic students and PGY-1 EM residents. In the case of a patient with a left bundle branch block (LBBB), this can be particularly difficult as Sgarbossa’s criteria must be utilized. While emerging evidence supports using alternative learning methods like musical mnemonics to improve engagement, limited empirical research has evaluated their effectiveness. This study addresses the gap in evidence by comparing music-video instruction to traditional lecture for teaching this diagnostic skill.

Curricular Design: This prospective study included paramedic students, PGY-1 EM interns, and medical students. Participants were divided into two groups, a traditional lecture-first group and a music video-first group. The innovation (music video instruction) was chosen to leverage emerging data on the benefits of using multimedia tools to increase engagement and memory. The module consisted of an instructional music-video reinforcing Sgarbossa’s criteria. Both groups completed pre-intervention and immediate post-intervention knowledge assessments on ECG identification of ST-segment myocardial infarction and recall of Sgarbossa criteria.

Impact/Effectiveness: The lecture-first group improved their average pre-test score by 14% (46% to 60%; $p = 0.00048$). The music video-first group improved by 19%

Comparing the groups
 $p = .37854$ (two tailed, unpaired t test) for the difference in test score improvement



(41% to 60%; $p < 0.00001$). There was no significant difference between the groups scores ($p = 0.378$), suggesting both methods were effective in reinforcing comprehension. This innovation contributes to medical education by demonstrating that music video-based instruction achieved comparable knowledge gains to traditional lecture.

59 Transforming Resident Efficiency Feedback: A Framework for Meaningful Productivity Metrics

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Introduction: Emergency Medicine (EM) residents increasingly seek objective efficiency data, yet traditional productivity metrics, such as patients per hour, are often delivered without context and fail to influence residents’ self-perception or practice. This gap highlights the need for a structured, educational approach to efficiency feedback aligned with ACGME Practice-Based Learning and Improvement milestones.

Educational Objective: To develop and implement a reproducible framework for extracting, contextualizing, and delivering EHR-derived productivity metrics to EM residents, paired with targeted education and structured feedback.

Curricular Design: We created an automated EHR query generating individualized metrics (patients per hour, ESI distribution, time-to-disposition). These data were delivered twice annually in a blinded format outside formal evaluations. Each data release was paired with brief didactics focused on interpreting productivity metrics and understanding their limitations. Residents provided feedback via anonymous surveys to guide iterative improvement.

Impact/Effectiveness: Our innovation produced a scalable framework for meaningful efficiency feedback emphasizing (1) blinded, non-punitive data sharing, (2) semiannual delivery separated from summative evaluation, and (3) pairing metrics with dedicated education. Among 35 residents, 29 responded (82.9%): 75.7% reported efficiency data were useful for their development, and 90.9% valued the accompanying educational sessions. Only 17.2% felt patients per hour accurately reflected true efficiency, underscoring the importance of contextual education and more nuanced assessment methods. This model offers a practical, generalizable approach for EM residency programs seeking to enhance resident understanding and use of productivity metrics.

60 ABEM CE Prep: A Novel Approach to Prepare Residents for the ABEM Certifying Examination

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Introduction/Background: In January 2024, the

American Board of Emergency Medicine (ABEM) announced a redesigned Certifying Examination (CE) to be launched in 2026 consisting of eight case types: Clinical Decision-Making, Difficult Conversations, Managing Conflict, Patient-Centered Communication, Prioritization, Procedures, Ultrasound, and Reassessment. Led by residency program faculty serving as content experts for each case type, we developed interactive, case-based exercises (ABEM CE Prep) that reflect the new CE format and incorporated them into residency training.

Educational Objectives: (1) design and execute a series of interactive, case-based exercises that mirror ABEM’s eight CE case types with the assistance of residency program faculty content experts, and (2) create matched numerical scoring systems for formative feedback.

Curricular Design: Using ABEM materials for each of the eight CE case types, faculty content experts (1) prepared a corresponding interactive, case-based exercise, and (2) created a numerical scoring system matched to each case based on ABEM’s general scoring criteria. We initiated biannual, four-hour, in-person ABEM CE Prep training sessions within our residency conference. For these sessions, residents rotated every 15 minutes through the eight CE case stations led by the faculty content expert case creators. Resident performance at each station was assessed using each case’s structured numerical tool via QR-coded forms. The faculty content experts also provided immediate verbal feedback to each resident on their performance at each station.

Impact/Effectiveness: Our ABEM CE Prep initiative is designed to help residents prepare for the ABEM Certifying Examination and engage faculty in this interactive training. Future work should assess how resident scores during these sessions predict ABEM CE performance.

61 A Humanities-Based Innovation: Narrative Medicine for Trauma-Informed Learning in the Emergency Medicine Clerkship

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Introduction: Medical students rotating in the ED regularly encounter high-acuity cases and traumatic events, which can challenge their well-being and learning. Narrative medicine (NM) cultivates empathy, self-awareness, and meaning making through reflective practices such as close readings and reflective writing. While it has shown positive outcomes among medical students and residents, its use in the ED remains limited. Trauma-informed care (TIC) frameworks are also emerging in undergraduate medical education to better support students’ emotional well-being in challenging clinical settings. Given the overlap in goals, we position NM as a tool that operationalizes TIC principles—namely, psychological safety and peer support—through structured,

reflective narrative practices tailored to the ED.

Educational Objectives: Students will be able to apply NM techniques to critically analyze their clinical experiences in the ED, identify TIC principles in their educational and clinical interactions, and engage in reflective practices that promote empathy and build peer support.

Curricular Design: The ADDIE instructional design model was used to create a novel NM curriculum rooted in social constructivist and critical theory for senior medical students during their EM clerkship. Twenty-three students participated from August 2024 to March 2025. Cohorts of four to six students participated in three in-person workshops and two asynchronous writing activities. Workshops included didactics, close readings, and guided reflective writing, such as “parallel charting” and creative prompts. Facilitators established trauma-informed norms and led discussions to foster psychological safety, meaning-making, and peer connection.

Impact: Twenty-two students completed the course evaluation survey (96% response rate). Most anticipate using NM in the future (95%, n=21) and felt the curriculum was relevant to their role as students (91%, n=20). Similarly, (91%) of students found the curriculum useful during their EM rotation. In written feedback, students described using NM to reflect on their clinical encounters in the ED, process emotional experiences, and build empathy. This pilot offers a feasible, transferable approach to integrating reflective, trauma-informed approaches into the EM clerkship.

62 Enhancing Pediatric Emergency Medicine Training through EPA-Based Simulation: A Dual Benefit for Medical Students and Emergency Medicine Trainees

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Introduction: Emergency Medicine (EM) trainees often have limited exposure to pediatric emergencies, particularly high-acuity scenarios such as neonatal resuscitation and procedures like airway management and lumbar puncture—skills aligned with the AAMC Entrustable Professional Activities (EPAs). A 3-part simulation curriculum originally designed for third-year medical students (targeting EPAs 10–12: neonatal sepsis, informed consent, and lumbar puncture) also proved valuable for EM residents and fellows. This dual-purpose model reinforced pediatric EM knowledge and procedural skills for both learners and facilitators.

Educational Objective: To improve medical students’ knowledge, confidence, and procedural skills in managing neonatal sepsis, obtaining informed consent, and performing lumbar puncture, while enhancing EM facilitators’ clinical and teaching proficiency through a train-the-trainer approach.

Curricular Design: Delivered during pediatric clerkship,