

## 58 Lyrics and Leads: Remixing EKG Education Through Music

Jordan Palmer, Stephanie Cohen, Shayne Gue, Joseph Ray, Ayanna Walker, Jeff Katz, Mark Yassa, Chelsea Grant

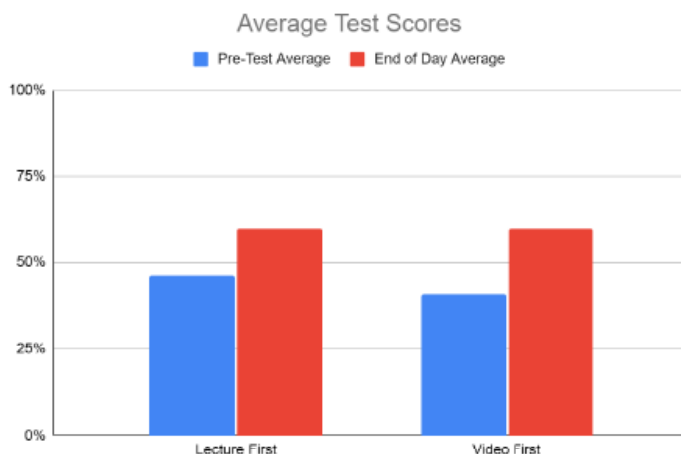
**Educational Objectives:** To evaluate the effectiveness of using music-video based teaching for improving comprehension and retention of Sgarbossa’s criteria amongst paramedic students and post graduate year 1 (PGY-1) EM residents.

**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

Frannie Rudolf, Leslie Oyama, Taylor Murray, Brian Kwan

**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

James Gillen, Enola Okonkwo, Jordan Beau, Nikhil Patel

**Introduction/Background:** In January 2024, the