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Paper-To-Picture — “Science You Can See” Redefining How to Stay up to Date with Current Medical Literature

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observing faculty model the scenario and emphasized interest in expanding the approach to other critical procedures. This work provides the medical community with a novel simulation debriefing approach that supports resident learning during emotionally challenging clinical scenarios and can be adapted to a variety of clinical cases.

53 Podcasts Are an Effective Tool for Teaching Evidence-Based Medicine to Emergency Medicine Residents

Andrew Mastanduono, Debby Yanes

Background: Incorporation of Evidence-Based Medicine (EBM) in residency curricula is challenging for residency educators. Graduates from accredited programs are expected to be well-versed in the critical appraisal of EBM. Teaching EBM is difficult due to lack of resident motivation/interest, poorly-trained faculty, and the well-researched dysfunction of Journal Clubs for modern learners. We developed a novel curriculum using podcasts to improve EBM education for our Emergency Medicine (EM) residents.

Methods: A pre-survey was sent to all residents and faculty to assess baseline use and opinions of EBM in clinical practice. A technology-based curriculum via published podcasts followed by in-person discussion was conducted for 6 months along with session feedback. Three months after each session, participating residents received a quiz with clinical scenarios to assess retention of knowledge gained from the sessions. A 6-month post-survey was sent to all residents to re-examine their opinion of learning and incorporating EBM into their clinical practice, as well as to assess their overall impression of the value of the curriculum.

Results: The pre-survey noted EBM use in the clinical setting was highest among those who read more articles ($p<0.028$). 100% agreed with the importance of staying up-to-date with EM literature, but only 12% indicated they enjoy reading/listening to EBM resources. After each session, residents uniformly enjoyed the sessions with 98% rating them 5/5 and 2% rating them 4/5. After 6 months, 53% of participants stated they enjoyed listening to/reading EBM resources (up from 12%). Seventy-three percent noted they used EBM to make clinical decisions as a direct result of the curriculum. Residents also demonstrated strong retention of knowledge from the sessions, with an average score of 72% correct on the follow-up quizzes (Supplement 4).

Conclusion: Our novel curriculum of assigning published podcasts to emergency medicine residents is an effective, entertaining, and enjoyable means for educating resident learners on the latest evidence-based medical literature.

54 Improving Emergency Medicine Resident Competency in Social Determinants of Health Through a Structured Instructional Training Framework: A Pre–Post Study

William Waite, Reshma Sharma, christine vandillen, Danielle DiCesare, Jay Ladde

Educational Objectives: Emergency departments serve as critical access points for patients disproportionately affected by the Social Determinants of Health (SDOH). Despite their importance, many emergency medicine (EM) trainees report limited formal education and inconsistent confidence in addressing SDOH related barriers to care. To improve resident competency, we implemented an SDOH focused Instructional Training Framework (ITF) within an EM residency program. Our objectives were to evaluate changes in EM residents' knowledge, confidence, and perceived ability to identify and address SDOH after participating in the ITF curriculum.

Curricular Design: Residents rotated through multiple interactive stations designed to simulate real SDOH encounters and teach targeted skills. A pre and post intervention survey was administered to residents in the SDOH ITF session. Surveys used matched questions on a 1–5 Likert scale (1 = strongly disagree/very low confidence; 5 = strongly agree/very high confidence) assessing understanding of SDOH concepts, awareness of resources, confidence in screening, and ability to intervene or refer. Mean pre/post scores were compared across domains.

Impact/Effectiveness: Thirty-four physicians completed both surveys. Respondents demonstrated substantial improvement across competencies. Confidence applying SDOH screening tools increased from 2.8 to 4.4 (mean change +1.6, 95% CI 1.3–1.9). Ability to identify at-risk patients improved from 3.0 to 4.5 (mean change +1.5, 95% CI 1.2–1.8). Knowledge of community resources rose from 2.6 to 4.2 (mean change +1.6, 95% CI 1.2–2.0). Overall scores showed a uniform upward trend following the curriculum. A structured SDOH focused curriculum significantly improved EM residents' knowledge and self-efficacy in identifying and addressing social determinants of health. Integrating targeted SDOH education into EM training may enhance resident preparedness, improve patient-centered care, and strengthen health equity efforts within emergency medicine practice.

55 Paper-To-Picture – "Science You Can See" Redefining How to Stay up to Date with Current Medical Literature

Elias Makhoul, Kyle Herout, Tony Zitek

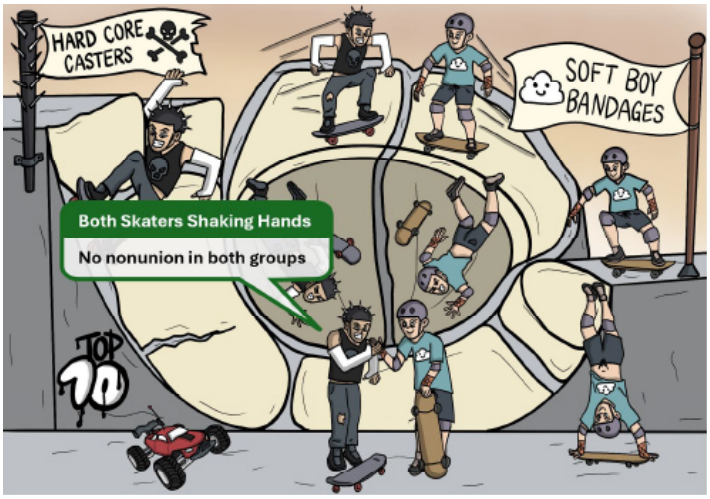
Background: Medical students performed better on exams when using story-based audiovisual mnemonics versus

textbooks and increased recall multiple weeks post intervention. Similar resources do not exist after medical school.

Educational Objectives: The primary objective of this study is to create mnemonic-based cartoon videos to highlight information from published scientific articles to improve retention amongst Emergency Medicine (EM) physicians. The secondary outcome is to assess clinical learning preferences pre- and post-intervention.

Curricular Design: Physicians at the Kaiser Permanente Central Valley Emergency Medicine Residency Program (KPCVEM) completed a survey to assess their preferred learning styles. A published article is selected for two journal club events between 8/1/25-10/30/25 to be discussed among physicians. The key points from each article were created into mnemonic-based cartoon videos using the Procreate App. At journal club, physicians were randomly assigned to either a cartoon-based video group or a discussion group. All participants completed a short quiz testing their recall immediately after and 3 weeks post journal club event.

Results: From the learning preferences survey, only 1(3.8%) of 26 respondents preferred reading research articles while 11 respondents (42.3%) preferred a cartoon-based summary. For two journal articles, a total of 14 physicians watched cartoon-based summaries and had a mean score of 92.2% (SD 8.7%) on post-video quiz. For the same two articles, 12 physicians in the discussion group had a mean score of 62.2% (SD 13.9%) on the post-discussion quiz. The difference between the mean scores of the two groups was 30.0% (95% CI 19.8% to 40.2%), $p < 0.0001$. After 3 weeks, the cartoon-based summaries group averaged 78.6% (SD 16.5%) on the quiz compared to 59.6% (SD 20.3%) in the discussions group, a between groups difference of 19.0% (95% CI -2.8% to 40.8%), $p = 0.08$.





Impact: This innovation may improve learning and retention of information from medical journal articles.

56 A SLOE Shift: A Resident-Led Rethink of Faculty Evaluation

Charles Khoury, Jarad Anderson, Madison Williams Chen, Logan Beach, Jarred Millard, Jaron Raper

Introduction: Traditional survey-based evaluations of faculty often produce vague or nonspecific insights and may not reflect residents' authentic experiences with clinical teaching and supervision. To improve faculty assessment, we implemented a resident-led structured interview model in which senior residents conducted confidential, domain-based evaluations of faculty performance.

Curricular Design: The Program Director appointed four senior residents as evaluation leads and trained them in confidentiality, neutrality, and structured interviewing. Each lead interviewed eight to ten residents across postgraduate year levels. Small groups of residents evaluated a total of fifty-eight faculty members using an eight-domain guide addressing clinical teaching, professionalism, supervision, feedback, efficiency and flow, engagement and effort, free-text reflections, and a global ranking modeled after the residency match. This final question asked residents to place each faculty member in the top, middle, or lower third of a hypothetical faculty rank list and justify their reasoning. Interview responses were synthesized using an artificial intelligence model to generate anonymized domain summaries and ranking distributions. The Program Director reviewed and contextualized the summaries before integrating them into faculty development discussions.

Impact: Residents reported that peer-led interviews created greater psychological safety and encouraged more candid and comparative assessments than traditional surveys. The match-style ranking proved especially intuitive and offered a SLOE-like snapshot that clearly distinguished faculty performance. Faculty described the summaries as more actionable and credible than prior evaluations. This pilot demonstrates that a resident-driven, AI-supported interview