51 Implementation of an Ultrasound Scavenger Hunt Increases both Point-Of-Care Ultrasound Use and Identification of Emergent Pathology

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Introduction: Point-of-care ultrasound (POCUS) improves the care of critically ill patients and is a core competency skill for EM residents. Several barriers can limit POCUS use, such as limited training time, the pace of a high-volume ED, and resident engagement. In order to increase POCUS use and enhance recognition of key emergent pathology, we created a POCUS scavenger hunt competition.

Educational Objectives: The primary objective was to evaluate if the implementation of a POCUS competition increases the number of POCUS performed by residents. The secondary objective was to evaluate whether it improved identification of emergent pathology that might have otherwise been missed.

Curricular Design: Two EM Ultrasound Directors designed a unique POCUS scavenger hunt competition for our EM residency. The competition contains twenty different POCUS pathologies essential to EM listed on an oversized poster board in the resident lounge. To receive credit for collecting a pathology, the resident needed to correctly save images and complete electronic medical record documentation. Once reviewed for quality assurance by US faculty, a sticker of their face was placed on the poster under the specific pathology. Great saves and leaderboard updates were shared throughout the year to sustain engagement. A year-end award ceremony highlighted best cases and educational teaching points. The top three residents with the most stickers won, with first place receiving a perpetual trophy.

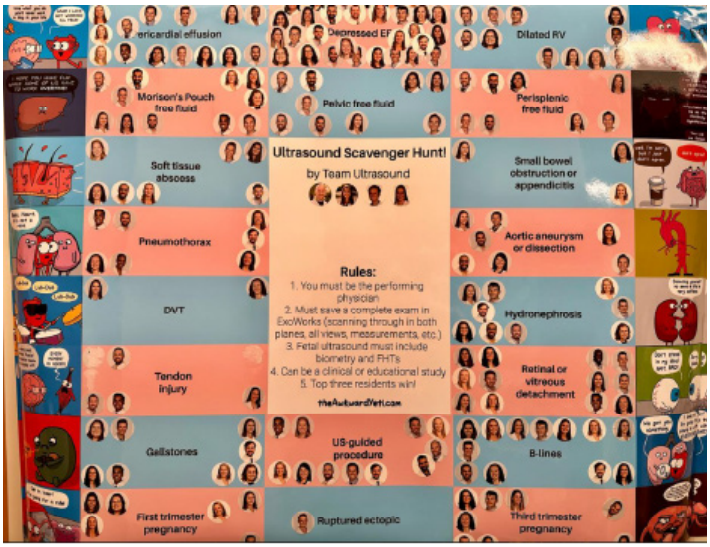

Image 1, US Scavenger Hunt poster

Impact/Effectiveness: Following implementation, 90% of residents (95%CI 70-99) reported increased POCUS use. Additionally, 68% (95%CI 44-86) identified pathology they might not have otherwise discovered due to participation. The competition enhanced both education and patient care through a creative, gamified approach. Now in its second year, the US scavenger hunt continues to promote POCUS engagement and improve diagnostic awareness in the ED.

52 Phased Separation of Emotions and Practice in Simulation to Improve Resident Training in Resuscitative Hysterotomy

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Background: Maternal cardiac arrest requiring resuscitative hysterotomy (RH) is a rare and unfortunate event that demands rapid decisions and precise procedural skills. These high-stakes cases also require trainees to perform under emotionally activating conditions. Simulation-based medical education offers an opportunity to prepare residents for these high-acuity scenarios, yet little is known about how best to support learners' psychological safety during emotionally charged simulations. The Phased Separation of Emotions and Practice in Simulation (PSEPS) method is a novel approach in which learners first observe an emotionally charged scenario, participate in an emotional debrief, and then engage in deliberate practice. This method allows a structured separation between an emotional debrief and technical practice to promote emotional processing and skill acquisition.

Educational Objectives: To assess whether this simulation method improves resident comfort with managing maternal cardiac arrest, strengthens procedural confidence in RH, supports psychological safety, and enhances the educational experience.

Curricular Design: Seventeen EM residents in a PGY1-3 program participated in a simulation in which they first observed a maternal cardiac arrest, engaged in an emotional debrief, and then practiced the procedural skills involved in RH using a newly designed model. Matched pre- and post-training surveys measured psychological-safety domains and self-efficacy. Paired t-tests compared pre- and post-intervention scores.

Impact: Nine residents completed the matched surveys. Confidence increased significantly for managing cardiac arrest (Mean Δ –1.14 +/- 0.90; $P = 0.015$) and performing RH (Mean Δ –1.89 +/- 0.93; $P < 0.001$). Several psychological-safety items, including feeling valued and feeling safe to take risks, demonstrated positive trends though did not reach statistical significance. Free-text responses highlighted appreciation for

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

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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