

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

Jillian Stone, Stephen Leech, Reshma Sharma, Tyler Moriarty, Shivani Ruf, Christopher Serle, William Waite

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.

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

Frances Rusnack, Alexandra Ortego, Sunil George, Marina Frayberg, Alexander Croft, Amil Badoolah, Denise Gaughan

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 $\Delta -1.14 \pm 0.90$; $P = 0.015$) and performing RH (Mean $\Delta -1.89 \pm 0.93$; $P < 0.001$). 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

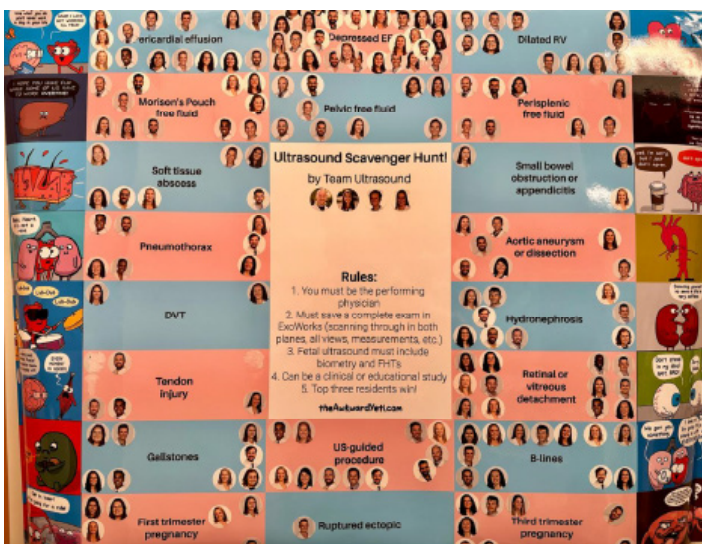


Image 1. US Scavenger Hunt poster