

summative descriptive feedback provided to the residents. Additionally, this evaluation would be automated to provide real time responses to the resident and faculty evaluator via e-mail upon submission.

Design: The residency program directors developed a three-part evaluation form in Microsoft Forms that included written summative feedback, a three-point survey of milestone evaluations, and a procedural evaluation (figure 1). This form was viewable and able to be completed on a single webpage on both computers and mobile devices. An automated workflow was designed using Microsoft Power Automate, a user-friendly cloud-based service using AI. Upon submission of an evaluation, this workflow automatically captures and distributes evaluation data to the resident, faculty evaluator, and residency leadership, while storing the data in an easy to navigate Microsoft Excel file (figure 2).

Impact: Since implementation, we have seen a nearly three-fold increase in the number of evaluations compared to the same period of the prior academic year. Additionally, an increase in the quantity of descriptive feedback, as well as improved quality has been noted. Informal polling of both residents and faculty has noted increased satisfaction with this evaluation tool. Moving forward, we hope to further develop an automated workflow to distribute evaluation reminder e-mails to faculty using our scheduling software.

10 Teaching Ultrasound Guided Fascia Iliaca Block to EM Residents

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Introduction: The fascia iliaca block (FIB) has emerged as a valuable tool in EM for providing effective analgesia in patients with hip fractures. FIB is a safe and easy-to-perform procedure, offering reduced opioid consumption and improved patient comfort. Given the increasing emphasis on point-of-care U/S in EM residency programs, there is a unique opportunity to integrate FIB training into resident curriculum. However, little research has been conducted on the most effective methods for integration. Our study aims to

address this gap by evaluating a brief educational intervention (BEI) designed to improve residents’ knowledge, skills, and confidence in performing FIB in the ED setting.

Educational Objectives: This study aimed to assess the effectiveness of a BEI on U/S-guided FIB. Our educational objectives were to educate EM residents about the FIB including its uses, demonstration of how to perform, and resident performance of an FIB in a simulated scenario.

Curricular Design: We created a BEI that focused solely on U/S guided FIB and consisted of two parts. Part one was completed asynchronously through Canvas LMS, which consisted of a pre-test, a recorded video, and a post-test. The recorded video discussed the regional anatomy, procedure indications, contraindications, complications, and step by step instructions. Part two consisted of a simulation-based scenario in which residents practiced U/S guided FIB on phantom models.

Impact/Effectiveness: This BEI was open to all EM residents (3-year program with 6 residents per year) at a Level 1 trauma center in the Southeast US. Residents who were part of the research team were excluded. All 15 eligible residents completed the BEI. Pre-test results showed that 20% (3/15) of residents scored > 75%. Post-test results showed an increase to 60% (9/15). We used the paired samples t-test to determine if the difference between pre-and post-test scores was significant. The value of t was 2.982 with a p value of 0.00989. After the BEI, all residents reported feeling confident and prepared to perform a FIB. Additionally, they felt more comfortable performing FIB and believed the procedure was important to their education. Overall, the intervention was found to be effective in improving knowledge, and residents felt more comfortable performing FIB after the intervention.

Research Abstracts

1 Effects of a Refresher Course on Graduating Medical Students’ Confidence in Point-Of-Care Ultrasound Skills

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Background: Although point of care ultrasound (POCUS) is increasingly utilized across several medical specialties, few medical schools include dedicated POCUS education as part of their 4th year curriculum. This is a critical time in education, and lack of confidence in POCUS skills at the onset of residency may play a role in decreased POCUS utilization as new physicians. We designed a POCUS course specifically for graduating 4th year medical students to address this deficit.

Objectives: We aimed to determine if participation in a POCUS refresher course impacts graduating medical students' confidence level in POCUS skills and planned frequency of POCUS use during internship.

Methods: We conducted a cross-sectional study of graduating non-surgical specialty-bound medical students participating in a POCUS refresher course 1-2 months before graduation. The course consisted of a two-hour didactic session followed by a hands-on practice session reviewing lung POCUS, cardiac POCUS, IVC POCUS, and ultrasound-guided access. Students completed pre-course and post-course surveys assessing their confidence in POCUS skills, planned utilization of POCUS as interns, and need for additional POCUS training before internship on a 5-point Likert scale.

Results: 179 students completed surveys before and after participating in the POCUS refresher course. After the course, students reported increased confidence in their POCUS skills ($p < 0.001$) and felt they were more likely to perform lung POCUS ($p < 0.001$), cardiac POCUS ($p < 0.001$), IVC POCUS ($p < 0.001$), and ultrasound-guided access ($p < 0.001$) during internship. Participants also reported decreased need for additional POCUS training prior to beginning internship ($p = 0.004$) (Table 1).

Question	Pre course score mean (CI)	Post course score mean (CI)	P value
Confidence in POCUS skills	2.02 (0.02, 4.02)	2.68 (1.31, 4.04)	<.001
Likelihood of needing additional POCUS training during your internship year before using POCUS	4.26 (1.88, 6.64)	3.98 (1.73, 6.23)	<.01
Planned frequency of POCUS use during internship	3.30 (1.10, 5.50)	3.65 (1.44, 5.87)	<.001
Planned frequency of lung POCUS use during internship	2.98 (.77, 5.20)	3.36 (1.15, 5.57)	<.001
Planned frequency of cardiac POCUS use during internship	3.18 (.90, 5.45)	3.58 (1.41, 5.74)	<.001
Planned frequency of IVC POCUS use during internship	3.14 (.88, 5.40)	3.46 (1.15, 5.76)	<.001
Planned frequency of ultrasound-guided peripheral IV placement during internship	3.20 (.86, 5.53)	3.71 (1.32, 6.07)	<.001
Planned frequency of ultrasound guided-central line placement during internship	3.42 (.70, 6.14)	4.04 (1.53, 6.55)	<.001

Conclusion: Participation in a POCUS refresher course 1-2 months prior to graduation increased medical student confidence in POCUS skills and planned frequency of use of POCUS applications during internship. As a result, this POCUS refresher course may serve an important role in better preparing new physicians for the increasing use of POCUS in medical practice.

2 Lessons Learned from an High Fidelity in situ ED ECMO Simulation Pilot

Alexandra Filkins

Background: ED initiated ECMO based CPR (eCPR) is a critical intervention to provide circulatory support for select cardiac arrest patients. As a high acuity low frequency procedure, it requires orchestration of ad-hoc teams, performing procedures in an unfamiliar environment, all within a tight timeline. We designed an interdisciplinary high fidelity simulation pilot program focused on the nontechnical skills of ED based eCPR. Educational Objectives: Prior to eCPR program initiation, needs assessments and interdisciplinary training are required to ensure a smooth process. We created an in situ simulation pilot to identify common clinical and educational needs for ED based eCPR at our safety-net urban level one trauma center.

Curricular Design: A simulation scenario was designed by clinical experts in simulation. The case began with an EMS call and concluded with the manikin on eCPR exiting the ED and participants included all members of the eCPR code team including EPs, CT surgeons, nurses, RT,, ED and ECMO technicians. The pilot was run in the same ED resuscitation bay by staff while on shift. The SIM was debriefed using the PEARLS method. We collected feedback about the roles and tasks of each member, medical and procedural understanding, as well as general comments. We conducted a thematic needs analysis, which was then used to refine the eCPR process and guide future training

Results: A consistent theme across all debriefings was the need for role clarification around learners, particularly for ED residents. Based on the survey we created the defined roles based on level of training. We identified important disconnects between team members regarding indications for chest compressions, defibrillation, and medications before, during, and after cannulation.

Conclusion: This eCPR in situ simulation identified the need for predefined and sequential roles for ED residents as well as targeted educational training on various phases of eCPR care.

3 Paving Professional Development Tracks: Create a Road from Scholarship to Program Requirements

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Background: The ACGME requires residents to participate in scholarship, quality improvement (QI), and patient safety (PS). Academic tracks that focus on a particular