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Emergency Physicians Evaluation of Second and Third Trimester Pregnancy Using Point of Care Ultrasound: A Pilot Study

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Image.

6 Sick or Not Sick? Teaching Medical Students to Identify Patient Acuity and Prioritize Tasks

Adam Payne, Meghan Mitchell, Zoe Listernick, Jenna Fleming, Lindsay Koressel

Background: One entrustable professional activity (EPA) identified by the AAMC is the ability to recognize a patient requiring urgent or emergent care and initiate evaluation and management. The critical skills in residency of task prioritization and acuity recognition are rarely explicitly taught in undergraduate medical education.

Educational Objectives: We created a simulation-based mastery learning (SBML) curriculum for senior medical students targeting key aspects of EPA 10 including task prioritization, evaluating clinical changes, and management.

Curricular Design: A group of clerkship directors and educators created a SBML “sick or not sick” curriculum for fourth year students. After a literature review, a group of experts used a modified Delphi approach to create an ideal performance checklist. A second group then used the Mastery-Angoff method to set a minimum passing standard for the checklist which was employed to assess student performance in a simulation baseline assessment (BA). For the BA students were presented triage information on three patients and had to choose which required attention first. After managing the patient, they selected the next most urgent patient to see. During each encounter, students received pager notifications about other patients that required triaging. After

the BA, students completed an interactive asynchronous module designed by the facilitators with clinical scenarios and a multiple choice exam. Students then participated in an in-person workshop consisting of a didactic portion and facilitated simulation with rapid cycle deliberate practice. The final portion of the curriculum was a post-test simulation structured like the BA.

Impact: Initial implementation was successful. In the initial pilot, all participants identified the curriculum as helpful and recommended its use. Next steps include a larger pilot to assess effectiveness, adding varied simulated cases, and embedding it within the fourth year curriculum.

7 Emergency Physicians Evaluation of Second and Third Trimester Pregnancy Using Point of Care Ultrasound: A Pilot Study

Reshma Sharma, Mitchell Guedry, Jillian Davison, Steve Leech, Anna Harper, Max Trojano

Introduction/ Background: Emergencies in the second and third trimester of pregnancy can be life threatening. With implementation of protocols that prioritize triaging patients towards obstetric hospitals rather than emergency departments, emergency medicine physicians encounter fewer of these critical cases. We considered the need for learners to practice a focused 5 step approach to point of care ultrasound (POCUS) for patients in their second or third trimester to gain rapid answers to clinically important questions.

Educational Objectives: The primary objective of our study was to assess learners’ knowledge and ability to accurately perform a focused POCUS on second and third-trimester pregnancies before and after instruction.

Curricular Design: This workshop offered both lecture and hands-on training on obtaining the five components of second and third-trimester POCUS: assessment of fetal presentation, fetal heart rate, fetal biometry, placental location, and evaluation of amniotic fluid volume. After a brief didactic presentation, learners were divided into 3 stations: hands-on training, two oral board style cases, and a whiteboard talk to reiterate the important components of second and third-trimester POCUS. Learners completed pre- and post-session assessments assessing comfort and medical knowledge.

Results: 21 residents participated in our workshop. Results are reported as mean, (95%CI). Learners were able to identify 2.6 (2.1-3.1) of the 5 components of the US protocol prior to instruction, vs 4.7 (4.4-5.0) after instruction. Learners’ confidence in performing and interpreting the US protocol improved from 3.65 (2.54-4.76) to 7.86 (6.60-9.12) on a 10-point Likert scale. Finally, learners’ knowledge as measured with 5 clinical questions on the pre-and post-quiz improved from 3.3 correct (2.8-3.8), to 4.7 (4.4-5). We

believe this was an effective workshop to review and practice a clinical skill that can improve patient care and save lives.

8 Shifting the Scale: Using Narrative Medicine to Navigate the Complexity of Pain in the ED

Suchismita Datta, Lyncean Ung, Yash Chavda, Neil Dasgupta, Carmelina Price

Background: The pain scale is taught as a method to quantify and acknowledge the perception of pain. The result is a subjective construct built by both the patient and clinician; therefore, its treatment is inherently complicated. In the absence of a formalized curriculum, the emergency medicine [EM] residents are not provided with adequate tools to have effective dialogues with their patients about pain. Appropriate communication skills are just as important as technical knowledge. Narrative medicine [NM] is an effective educational tool to teach empathy skills, specifically perspective-taking and engaged listening, and help EM residents learn how to effectively navigate conversations around pain.

Objectives: Design and implement a didactic session that illustrates the complexity of assessing pain. Apply the NM framework to teach the concepts of engaged listening and perspective-taking. Evaluate the impact of this session on learner perceptions.

Curriculum Design: NM is grounded in critical pedagogy and transformative learning theory. The essay “The Pain Scale” by Eula Biss was used to accomplish the three pedagogical steps of NM: close reading, critical reflection, and group discussion during a two-hour resident conference session. Learners were provided with materials to create their own pain scale and then share their artwork. ADDIE (Analysis, Design, Development, Implementation, Evaluation)

Table 1. Pain scale activity pre-survey responses.

Question	n=34	
What is your role?		
Faculty	4	11.8%
Medical student	8	23.5%
PA Student	1	2.9%
Resident physician	21	61.8%
When did you first learn about the pain scale?		
Medical School	13	38.2%
College/Undergrad	7	20.6%
Other	14	41.2%
How often do you use the pain scale to assess your patient?		
Always	5	14.7%
Frequently	16	47.1%
Rarely	8	23.5%
Sometimes	5	14.7%
Have you ever been asked to describe YOUR pain on a scale?		
No	9	26.47
Yes	25	73.53

Table 2. Pain scale activity post-survey responses.

Question	n=28	
How did this session change your perception of the pain scale?		
Response indicative of change in perception	25	89.3%
Response indicative of no change in perception	3	10.7%
What did you like about this session?		
Interactive/Sharing/Discussion	12	42.9%
Impact on Perspective	3	10.7%
Medical Humanities	11	39.3%
Blank/Missing	2	7.1%
What could have been done differently to make this session better?		
No change/Great session	24	85.7%
Change	4	14.3%
Go through shorter reading		
If possible, it would be helpful to read the whole piece beforehand		
More interactive if possible, it keeps things interesting and people energetic		
More time for pain scale creation		
What is your role?		
Faculty	3	10.7%
Medical Student	6	21.4%
PA student	1	3.6%
Resident physician	18	64.3%
Are you going to use this scale differently with your patients?		
Maybe	1	3.6%
No	3	10.7%
Probably	11	39.3%
Unsure	2	7.1%
Yes	11	39.3%

framework was used for instructional design. Content experts were recruited to ensure the authenticity of the educational material. A survey was designed to assess the impact on learners’ perception of the pain scale and was piloted amongst stakeholders to increase its situational validity.

Impact/Effectiveness: 89% of participants reported a change in their perceptions of the pain scale after the session. The empathy skills learned from this session can help physicians take better care of their patients and are applicable to both the UME and GME landscapes.

9 Development of a SLOE Review Committee to Limit Bias in SLOEs

Bryanne Macdonald, Liza Smith

Introduction: The Standard Letter of Recommendation (SLOE) is a key factor used to stratify candidates for residency interviews. Multiple studies have demonstrated biases within each section of the SLOE. Acknowledging the well described pervasive nature of these biases and the importance of SLOEs in interview and ranking decisions, it is imperative methods are employed to limit unintended bias.

Educational Objectives: We developed a SLOE review committee process aimed at limiting potential implicit bias in our departmental SLOEs. Specific objectives for the committee included identifying SLOEs with content that did not fairly represent a student or that might perpetuate a stereotype, as well as those with potential for controversy. **Curricular Design:** We designed a standardized process for review and revision of all audition clerkship SLOEs. A SLOE committee composed of education faculty, medical education fellows, and select senior residents was formed. All