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Expanding DEI Curricula in Emergency Medicine Graduate Medical Education: A Pilot Innovation Project

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was emailed to learners, and they were instructed to spend 10 minutes to complete it individually. After 10 minutes, the students were broken into breakout groups of 3-4 where they discussed the answers (TRAT). The students were then sent back to the large group where the questions were discussed by a facilitator. Next, the clinical problem-solving activity was conducted where learners were sent back to their breakout groups and worked through clinical cases. Each group was tasked to come up with three clinical questions based on the clinical cases that they would like to discuss in the large group and placed them in a shared Google doc. The students were then brought back to the large group where the facilitator led a discussion regarding the questions.

**Impact/Effectiveness:** We compared student perceptions of in-person and virtual TBLs assisting them to learn clinically applicable information. For in-person, the score was 4.53/5 (n=313) versus the virtual sessions score of 4.75/5 (n=103)(p=.008). This suggests that virtual TBLs can be effectively implemented.

## 14 Evolution of Medical Student Didactics: Using Simulation to Target High Acuity Clinical Topics Associated with Lower Examination Performance

*Damian Lai, Brent Becker, Nicole Peters*

**Introduction/ Background:** 4th year medical students planning on pursuing emergency medicine (EM) typically spend 4 weeks working in the emergency department (ED) during a rotation. Clinical exposure is paramount for these learners; however, students often assume a less active role in higher acuity and unstable patients. Consequently, it is difficult to assess their knowledge base and comfort level managing more critical patients. At our residency we emphasize simulation during didactics to provide students the opportunity to demonstrate their clinical knowledge, leadership and teamwork.

**Education objectives:** 1) Examine EM rotation examinations to identify topics on which medical students generally performed lower. 2) Design simulations to address these topics, increase knowledge retention and improve clinical comfort level.

**Curricular design:** Medical students complete a standardized multiple choice EM exam during their rotation that has remained largely constant over the past 5 years. We compiled the scoring data from a total of 121 students and identified 3 areas of lower performance related to high acuity patient care: Trauma, Seizures, and GI Bleed. Custom simulations focusing on these scenarios were added to existing simulations on respiratory distress and cardiac arrest. A standardized scoring rubric was used to assess medical student performance. Students reported their pre-

and post-simulation comfort level managing the 3 scenarios on 5-point Likert scales.

**Impact/effectiveness:** For applicants to residency in EM, the simulation scoring rubric provided an objective data point for the didactic scoring portion of their rotation grade. Comparison of paired pre- and post-simulation surveys via the McNemar's test (p=0.05) demonstrated a significant improvement in students' comfort level managing all 3 patient scenarios.

## 15 Expanding DEI Curricula in Emergency Medicine Graduate Medical Education: A Pilot Innovation Project

*Whiney Johnson, Leah Bauer, Xian Li, Patil Armenian, James McCue, Michelle Storkan, Stephen Haight, Sukhjit Dhillon, Lily Hitchner, Jessie Werner, Courtney Pettigrew, Rahul Rege, Camila Mateo*

**Introduction/ Background:** The ACGME has new requirements to address issues of diversity, equity, and inclusion. While it is unclear what the best method is for delivery of DEI education, this innovation aims to introduce a framework for a longitudinal curriculum that integrates directly into the EM residency weekly conference with the goal of educating physicians and prioritizing DEI in clinical practice.

**Educational Objectives:** This innovation is designed to: (1) recognize and discuss the impact of healthcare disparities in emergency medicine, (2) collaborate with members of the faculty and resident team to learn about and discuss the effects of health disparities, and (3) self-evaluate and reflect on their experiences and lessons learned.

**Curricular Design:** This longitudinal curriculum was designed the decision to create modules that integrate directly into weekly educational conference with a goal to eliminate the common practice of optional DEI education. Implementation directly into conference demonstrates the importance of showing learners that DEI is a vital component of practicing holistic medicine. The program was structured as modules with 5 core themes followed by targeted topics within those categories. There were 6, 2-hour sessions throughout the academic year that included a 1-hour lecture followed by small groups that included follow up discussion questions, case-based simulations, and review articles to reinforce key concepts learned. Additional educational material was provided for asynchronous learning. The course was assessed utilizing a voluntary, anonymous retrospective pre/post survey.

**Impact/Effectiveness:** The framework we present provides a model for which other programs in GME may implement DEI education. We present pre- and post-survey results from our pilot group highlighting the areas of growth in knowledge and understanding, as well as some of the

suggested areas of improvement and desired expansion for the future curriculum.

**Table 1.** Retrospective pre-post-survey.

Q6 BEFORE DEI course: My knowledge of...						Q7 AFTER DEI course: My knowledge of...						
	NONE	A LITTLE	SOME	A LOT	WEIGHTED AVERAGE		NONE	A LITTLE	SOME	A LOT	TOTAL	WEIGHTED AVERAGE
Radiobiology historical impact	0.0%	15.0%	57.0%	28.0%	3.12	Radiobiology historical impact	3.00%	0.0%	26.0%	68.0%	3.62	3.62
Currently competent care of the LGBTQ+ community	3.0%	33.0%	42.0%	19.0%	2.81	Currently competent care of the LGBTQ+ community	3.00%	0.0%	43.2%	53.8%	20	3.46
DEI in radiology/ultrasound	0.0%	38.4%	48.0%	13.6%	2.77	DEI in radiology/ultrasound	3.00%	0.0%	38.4%	57.6%	20	3.50
DEI impact in academic medicine	7.0%	34.0%	48.0%	11.0%	2.62	DEI impact in academic medicine	3.00%	0.0%	42.0%	53.0%	20	3.40
Formation of an anti-racist professional identity	25.0%	28.0%	38.0%	9.0%	2.82	Formation of an anti-racist professional identity	3.00%	0.0%	34.0%	63.0%	20	3.54
Reflection/racism strategies case discussions	7.0%	42.0%	38.0%	13.0%	2.34	Reflection/racism strategies case discussions	4.00%	1.0%	9.0%	86.0%	20	3.44

**Table 2.** Participant impact.

Q9 Do you think this course impacted or changed your current practice? Why or why not?

ANSWER CHOICES	RESPONSES
Yes	73.00%
No	7.69%
I don't know	19.31%
Total Respondents: 26	

  

made me become aware of what terms I can use to be helpful	It has made me more aware of terminology associated with trying to make our environment more inclusive and has made me more aware of the struggle people face with getting care as well as other physicians may face in the professional environment. It has made me aware of my privilege in this sector and given me tools as to how I can work to create a more inclusive environment.
I'm better equipped to care and advocate for diverse patient populations	Yes. It has made me more mindful of potential biases I may have and given me strategies to combat them.
While I have spent a lot of time in the health equity space there is constant need for learning and improvement. I think this course allows us to slow down from our fast paced environment and reflect on mistakes and how we can do better. Similar to other M & M's.	These are concepts that are persistent in my everyday life, not just my practice in EM. Great course, please keep it for future years!
This course created a shared understanding and language to discuss these important issues in our emergency department. Since we took this course as a residency as a whole, we now can hold each other accountable to important changes and discuss events in a more productive manner.	I think I just to be more aware in every patient interaction and also helped to help residents navigate these complex situations.
I think that it has allowed me to be ok with what I don't know and allow me to ask questions as a learner and physician that at first I was not comfortable asking. I enjoyed the safe space to have conversations around topics that have been challenging for me in the past. Thank you.	I will be more aware of these topics and how to deal with them in real time.
I now feel more confident addressing and interacting with patients who have many different racial/ethnic identities.	broadened some of my knowledge base
I think I am much more aware of the racism in the work place and can be a better advocate	

**Design:** During each CCC meeting scores for each sub-competency (e.g., Patient care, Medical Knowledge, etc.) within each of the six core competencies were summed for each postgraduate year (PGY). Median scores are calculated for each of the six core competencies based on gender and UIM status, as defined by the Association of American Medical Colleges (AAMC). A median difference of greater than or equal to 0.5 triggers a review of the scores in real-time and if sustained over 2 CCC meetings a root cause analysis is implemented.

**Impact/Effectiveness:** The equity dashboard was piloted for one 4-year EM residency program for 3 CCC meetings, from 2021-2022. Once the milestone scores were finalized during the meeting, any differences in medians were discussed and the data was reviewed by CCC members. Real-time changes were made to ACGME milestone scores to ensure internal consistency and interrater reliability. Over 3 CCC cycles, a root cause analysis has not been needed thus far.

## 17 Gamification through Low-Fidelity Simulation to Teach Early Clinical Application of Point-of-Care Ultrasound

Daniel Saadeh, Lauren McCafferty

**Introduction/ Background:** Point-of-care ultrasound (POCUS) has become an integral part of EM residency training, but pre-residency exposure is highly variable. Efficiently teaching the many core POCUS applications to new EM interns in a 1-day bootcamp in a way that is effective, engaging, and clinically relevant can be a challenge. Gamification and simulation have been demonstrated to be valuable mediums through which to teach POCUS to undergraduate and graduate learners. Especially early in training, the emphasis is often on image acquisition and interpretation skills rather than clinical application, which is learned more in clinical practice throughout residency.

**Educational Objectives:** We utilized gamification and simulation as engaging educational techniques to introduce interns to the clinical application and integration of POCUS from the beginning of residency.

**Curricular Design:** As part of a POCUS bootcamp for EM interns in July, we incorporated a gamified approach into the curriculum. After learning the basics of image acquisition and interpretation, the learners were placed into teams for a competition stage where they rotated through seven low-fidelity simulation stations, each composed of a clinical scenario in which POCUS is commonly incorporated. Progression through each scenario depended on the learner's ability to successfully apply bedside ultrasonography to clinical care.

**Impact/Effectiveness:** This educational symposium

## 16 Educational Continuous Process Improvement: Implementation of an Equity Dashboard for ACGME Milestone Score Assessment

Jillian Mongelluzzo, Esther Chen, Evelyn Porter, Christopher Fee

**Introduction/ Background:** Studies have shown inequities in assessment within Graduate Medical Education (GME) based on race/ethnicity and gender identities of residents. Accreditation Council for Graduate Medical Education (ACGME) milestone assessment scores can serve as a warning sign for deeper issues in methods of assessment, well-being, or opportunities for residents. To help mitigate bias in assessment, we piloted an equity dashboard to compare outliers in semi-annual milestone scores by gender and underrepresented in medicine (UIM) status from one emergency medicine (EM) residency program.

**Educational Objectives:** 1. Implement an educational continuous quality improvement (ECQI) process, the equity dashboard, to identify outliers in ACGME milestone scores by gender and UIM status 2. If persistent discrepancies are identified, utilize a root cause analysis framework to gain a deeper understanding of the causes and formulate potential solutions.