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Gastroesophageal Balloon Tamponade Simulation-based Training in Emergency Medicine: Curricular Needs Assessment

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(SLOE) is one of the most important parts of a student's application for emergency medicine residency. Our department utilizes an electronic post-shift evaluation form that includes prompts for faculty to leave comments on what the student did well and where they should improve. When students are not given written feedback, it can be more difficult to write the narrative portion of the SLOE.

Objectives: Prior to academic year 2022-23, we implemented this QI project to improve the rate of individualized comments on student evaluations. Our aim was to present data to faculty regarding how often students received written feedback in the prior year in order to improve response rate in the future.

Methods: Fourth-year EM student evaluation data from May-September was used. Feedback data was aggregated and coded for anonymity. Comments were categorized based on which prompt they came from: what the student did well (positive) and what they should improve on (negative). The percentage of evaluations with positive, negative, and no comments was tabulated and data was presented at faculty meeting prior to audition rotations. After this intervention, the data for the same time period in 2022 was obtained and analyzed. This project was approved by the MCW Department of Emergency Medicine QI/QA Committee.

Results: There were 427 evaluations received for 36 students in 2021. In 2022, there were 33 students with 443 evaluations. In 2021, 64% of evaluations included at least one written comment. In 2022, 88% of students received at least one written comment. In both years, faculty were more likely to leave positive comments than negative comments.

Conclusions: Informing faculty about the rates that they are leaving comments for students as a group, drastically increased the rate of comments that were left the next year, assisting the process of writing SLOEs.

Table.

Type of Comment	2021	2022
Comments present	64 (273)	88 (390)
Positive	57 (245)	87 (384)
Negative	36 (152)	72 (318)
No comments	36 (154)	12 (53)

22 Flipping Journal Club to Teach Statistics to Emergency Medicine Residents

Brian Milman

Background: ACGME's Common Program Requirements state that programs "must advance residents" knowledge and practice of the scholarly approach to evidencebased patient care." Many EM residency programs utilize "journal club" to review medical literature and highlight statistical concepts important to resident education.

Objectives: This study aims to determine whether a structured intervention using a podcast format for teaching basic statistical methods improves EM residents' understanding of these concepts. We hypothesize that self-reported understanding of the discussed concepts will improve following implementation of a podcast-based flipped journal club.

Methods: In July 2022, University of Oklahoma Department of EM implemented a flipped journal club in which residents listened to a podcast discussing statistical methods prior to a classroom session discussing EM literature. Residents were surveyed in July 2022 prior to the intervention. Flipped journal club sessions were held monthly and residents were surveyed after each session. A Wilcoxon signed-rank test was performed comparing pre-survey and post-survey responses for each month's session.

Results: 24 out of 26 (92.3%) of residents filled out the initial survey. The August session covered type I and type II error, the September session covered RCTs, and the October sessions covered non-inferiority studies. The response rates of the post-session surveys were completed by 84.2%, 50%, and 46.7% of session attendees in August, September, and October, respectively. Residents reported increased understanding of type I and type II errors (p = 0.002) and non-inferiority trials (p=0.014) following intervention. Understanding of RCTs did not significantly increase (p=0.129).

Conclusions: Initial analysis of resident-reported understanding of statistical concepts shows statistically significant improvement in understanding following 2 out of 3 sessions.

23 Gastroesophageal Balloon Tamponade Simulation-based Training in Emergency Medicine: Curricular Needs Assessment

Cody McIlvain, Christopher Mowry, Maria Moreira, Anna Neumeier, Michael Kriss

Background: Gastroesophageal balloon tamponade (GEBT) tube placement is an infrequent, but potentially lifesaving procedure used as a bridge to definitive therapy in patients with variceal hemorrhage refractory to medical and/or endoscopic therapy. Competency with GEBT tube placement is crucial to emergency medicine (EM) training although educational experience is variable, and proficiency may not be achieved by clinical exposure alone.

Objectives: We sought to understand the experience, confidence, and educational needs of trainees and faculty with GEBT placement.

Methods: A survey-based needs assessment was sent to residents, fellows, and faculty within the Denver Health Residency in Emergency Medicine. The assessment addresses the experience, training needs, and self-confidence with GEBT tube placement and management. **Results:** 62 responses were included: 41/79 trainees (31 residents, 10 fellows) and 31/110 faculty (Figure 1). Most trainees agreed upon the need for proficiency in GEBT tube placement by training completion (4.8/5). Faculty agreed they should possess procedural proficiency (4.47/5) as most faculty expected to place a GEBT tube (4.4/5). Trainees had limited experience placing GEBT tubes in clinical practice (25% placed \geq 1). Faculty had more experience (70% placed \geq 1). Both faculty and trainees reported similar rates of prior simulation training (20% of trainees and 37% of faculty). Self-confidence with GEBT tube placement was low across all groups (trainees: 2.05/5; faculty: 3.28/5). Most respondents desired more training opportunities (trainees: 4.4/5; faculty: 3.8/5). The most desirable training modality was simulation-based training (trainees: 4.65/5; faculty: 3.86/5).

Conclusion: GEBT is an infrequently performed procedure and clinical exposure in emergency medicine training is insufficient to gain proficiency. Trainees and faculty within EM have minimal experience, low procedural confidence, and highly desire a simulation-based training.

		EM EM	
Europ Qualitie	Libert acals (1-1)		
		Trainee	Figuity
I expect to place at least one GEBT tube during my career.	Strongly disagree (1) - Strongly Agree (5)	4.63	4.43
Trainceain mythold should be proficient in CEST tube pincement upon completion of training program.	Strangly if myrac(1) - Brangly Agrac(5)	4.82	-
Faculty/attendings in my field should be proficient in GEBT tube placement.	Strongly disagree (1) - Strongly Agree (5)	-	4.47
Confidence placing GENT type without error.	Not confident (1) - Completely confident (5)	2.05	3.28
Confidence with management and troubleshooting of GEBT tube following placement.	Not confident (1) - Completely confident (5)	1.83	2.52
Confidence with instructing others how to properly place GENT tube.	Hot coefficient (1) - Completely coefficient (5)	1.91	2.86
I wish my current program had more training available.	Strongly disagree (1) - Strongly Agree (5)	4.4	3.83
How desirely is is expect sonous video to italing.	Net desired (1) - Very desired (6)	2.7	1.19
How desirable is case-based training.	Not desired (1) - Very desired (5)	3.24	2.29
How deal rable instituciation-based total of ng.	Hert dasines (1) - Very deal red (6)	4.59	8.00

Figure 1. Selected needs assessment questions with aggregatd responses for emegency medicine (EM) faculty and trainees (residents and fellows.

24 Gender and Racial Distribution of Emergency Medicine Bound Medical Student Membership in Professional Honor Societies

Alexandra Mannix, Katarzyna Gore, Sandra Monteiro, Sara Krzyzaniak, Dayle Davenport, Teresa Davis, Al'ai Alvarez, Melissa Parsons, Michael Gottlieb

Background: Gender and racial inequities exist in medicine and medical education. Previous literature has evaluated disparities in race or gender on $A\Omega A$ and GHHS membership. These studies have been limited to single

institutions and none have evaluated $\Sigma\Sigma\Phi$.

Objectives: Our study aimed to evaluate EM applicants honor society selection in A Ω A, GHHS, and $\Sigma\Sigma\Phi$ based on gender and/or underrepresented in medicine (URM) status.

Methods: We performed a multi-institution, cross-sectional study of applicants to three United States (US) EM residency programs during the 2019-2020 application cycle. Abstractors recorded the following: self-identified gender, self-identified race/ ethnicity as URM, and membership in A Ω A, GHHS, and $\Sigma\Sigma\Phi$. We calculated the odds ratio with 95% CI by gender and URM identity for the professional honor societies.

Results: A total of 2,168 unique applicants were identified, representing 66.3% of all US EM applicants for the 2019-2020 cycle. With respect to gender, 1336 (61.6%) identified as men, 829 (38%) as women, and 3 (0.1%) did not self-identify. With respect to race and ethnicity, 1675 (77.3%) identified as non-URM, 397 (18.3%) as URM, and 96 (4.4%) did not self-identify. We identified women being proportionally representation in GHHS [OR 1.33; 95% CI 0.96 - 1.84] and overrepresented in A Ω A [odds ratio (OR) 1.47; 95% CI 1.09 - 1.98;] and $\Sigma\Sigma\Phi$ [OR 1.49; 95% CI 1.01 - 2.22] compared to men. We identified URM applicants being proportionally represented in A Ω A [OR 1.16; 95% CI 0.81 - 1.65], $\Sigma\Sigma\Phi$ [OR 0.73; 95% CI 0.38 - 1.42], and GHHS [OR 0.80; 95% CI 0.51 -1.24] compared to non-URM applicants.

Conclusions: During the 2019-2020 academic year, women Emergency medicine applicants were overrepresented proportionally in GHHS, and overrepresented in A Ω A and $\Sigma\Sigma\Phi$. During the same time period, URM applicants were found to be represented in similar proportions in GHHS, $\Sigma\Sigma\Phi$, and A Ω A honor societies to non-URM applicants.

Table 1. lotal A Ω	A, ΣΦΣ, and GHH	S membersh	ip for gender	and	
URM identity					

Group	Men/Women	URM/non-URM
All Applicants	Men (1336) - 61.6%	URM (397) - 18.3%
	Wamen (829) - 38%	Non-URM (1675) - 77.3%
ΑΩΑ/ΜΟ	Men (104) - 52.3%	URM (47) - 23.6%
	Women (95) - 47.7%	Non-URM (146) - 73.4%
ΣΣΦ/ DC	Men (76) - 57.1%	URM (12) - 9.0%
	Women (56) - 42.1%	Non-URM (117) - 88.0%
GHIHS	Men (88) - 55.3%	URM (25) - 15.7%
	Women (71) - 44.7%	Non-URM (130) - 81.8%