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Flipping Journal Club to Teach Statistics to Emergency Medicine Residents

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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 evidence-based 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 life-saving 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.