

29 Emergency Medicine Virtual Conference Participants' Engagement with ep and Competing Activities

Deena Khamees, MD, MBA; Charles (Will) Kropf, MD; Sarah Tomlinson, MD; James A Cranford, PhD; Michele Carney, MD; Carrie Harvey, MD; Margaret Wolff, MD; Mary RC Haas, MD; Laura Hopson, MD

Learning Objectives: To characterize the competitive demands for learner attention during virtual didactics and pilot a methodology for future studies.

Background: Residency didactic conferences have transitioned to a virtual format due to the COVID-19 pandemic. This format creates new questions about learning outcomes, the success of which relies on learner engagement.

Objectives: To characterize the competitive demands for learner attention during virtual didactics and pilot methodology for future studies.

Methods: We conducted a prospective cohort study of attendees at virtual didactics from a single four-year EM training program. We designed an activity survey utilizing a self-report strategy informed by validated classroom assessments of student engagement. This two-question survey was deployed using Zoom™ polling across six conference days using random signaled sampling. Participants identified their learner role and reported all activities during the preceding 5-minutes.

Results: We had 1,303 responses over 40 survey deployments. Responses came from Residents (63.4%), Faculty (27.5%), Fellows (2.3%), Students (2%) or Others (4.8%).

About 85.3% of attendees reported engaging in the virtual conference within the last five minutes. A total of 902 out of 1,303 (69.2%) respondents reported engaging in

multiple activities, including: related-educational (34.2%), work-related (21.1%), social (18.8%), entertainment (4.4%), personal (14.6%), and self care (13.4%). There was a decline in reported engagement in conference and education-related activities as the conference block progressed.

Conclusions: Learners engage in a variety of other activities during virtual didactics. Engagement appears to fluctuate and trend temporally which may inform teaching strategies. This information may also provide unique instructor feedback. This pilot study demonstrates methodology for future studies of conference engagement and learning outcomes.

30 Evaluating the Core Emergency Medicine Entrustable Professional Activities using the EQual Rubric

Andrew Golden

Learning Objectives: The purpose of this investigation is to further study the interrater reliability of the EQual rubric. Additionally, it will examine the alignment of EPAs for EM residency training to published standards as defined by performance on the EQual rubric.

Background: Entrustable professional activities (EPAs) are being more frequently utilized in medical education workplace-based assessments (WBAs). Core EPAs for emergency medicine (EM) resident training were proposed in 2019 by CORD but have yet to be further evaluated. The EQual rubric is a validated tool to identify how EPAs align with published standards and a promising method to evaluate the EM EPAs.

Methods: Academic EM clinician-educators applied the EQual rubric to the 11 EM EPAs. Interrater reliability of the EQual rubric was analyzed using intraclass correlations (ICC) with an average-rating, two-way mixed-effects model measuring consistency. Mean and standard error of the mean (SEM) were calculated for each of the EPAs to identify those falling below a previously defined revision threshold.

Results: Four clinician-educators involved in undergraduate and graduate medical education from two academic medical centers participated in the study. The overall ICC for the EQual rubric was good at 0.73 (95%CI 0.65-0.79). Four items (29%) had poor reliability with ICCs < 0.4. The average EQual score for the EM EPAs was 3.89 (SEM ± 0.09) on a scale of 1 to 5. Six (55%) of the core EM EPAs scored below a revision threshold of 4.07.

Conclusions: The EQual rubric had good interrater reliability when implemented in EM clinician-educators and EPAs. Over half of the core EM EPAs performed below a previously defined cut point suggesting the need for revision. These results are limited by a small number of core EM EPAs and likely inexperience with EPAs in EM residency training programs in the US. Given the scope of EM, further research should evaluate the use of observational practice activities rather than EPAs in WBAs.

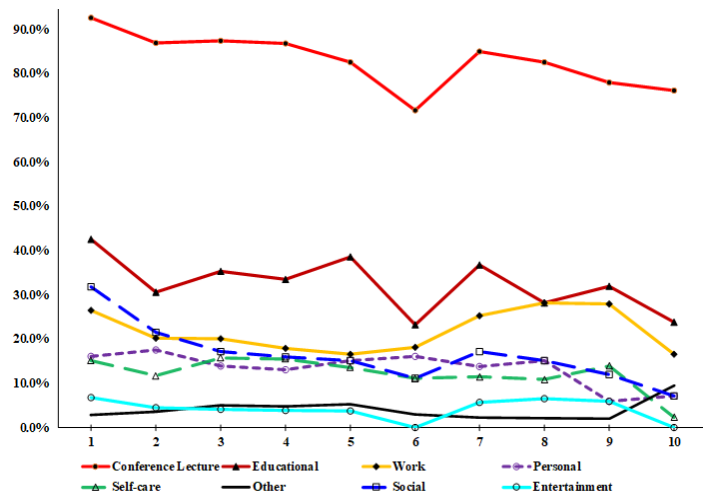


Figure 1. Activities Engaged in During the Last 5 Minutes, across All Polls and All Days. X-axis denotes the number poll deployed (1st polls of all days, 2nd polls of all days, etc). Y-axis denotes the percentage of respondents reporting each activity.