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Teaching EPA 10: A Simulated Clinical Experience Improves Novice Medical Student Knowledge and Comfort in Recognizing Patients Requiring Emergent Care

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Table.

	#	%	*No Interviews	*<5% of Interviews	*5-15% of Interviews	*15-30% of Interviews	Skipped Question	Matched Low 1/3	Did not Match Low 1/3	Not Sure	Skipped Question
All Respondents	96		5%	36%	42%	11%	5%	28%	40%	30%	21%
Strict Adherence	39	41%	5%	23%	51%	13%	8%	26%	41%	28%	5%
Loose Adherence	51	53%	6%	43%	37%	10%	4%	31%	37%	31%	0%
No Adherence	6	6%	0%	67%	17%	17%	0%	17%	50%	33%	0%

*Estimated percentage of applicants interviewed with a lower third ranking (outside of the institution's home students).

of respondents who rated students in the lower third still felt these applicants would become respectable EM physicians.

52 Social Media in Emergency Medicine Resident Education: A Needs Assessment

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Background: The use of social media has been well documented as an adjunct resource within the field of medical education. Platforms that fall within the broader term of “social media” include Twitter, Facebook, web logs (“blogs”), podcasts, YouTube videos and more. The field of emergency medicine in particular has embraced social media as evidenced by the rise of the FOAMed (Free Open Access Medical Education) movement. Emergency medicine residents around the country already utilize social media resources and many residency programs have started their own Twitter accounts and blogs. To our knowledge, however, no formal needs assessment data has been published on the topic to help guide the development of future resources.

Objectives: We aimed to assess the needs and attitudes of emergency medicine residents and faculty toward educational social media resources.

Methods: A voluntary, anonymous survey was developed through Qualtrics and sent via email to all emergency medicine residents and faculty of one four-year academic emergency medicine residency program in June 2015.

Results: The survey was emailed to 212 individuals with a response rate of 35% (75). Of the respondents, 39% (29) were residents with the remainder representing fellows (2) and attending physicians (44). Of the respondents, 76% already do or would consider using social media for educational purposes. Of all social media platforms, blogs and podcasts were voted to be the most useful for medical education. 44% of respondents have a Twitter account and 46% of respondents read educational blogs regularly. 95% of respondents agreed that the residency program should have a social media presence and 91% agreed that they would like to see a social media platform used for educational purposes within the residency. The Twitter content voted to be most useful for

educational purposes included cases with multiple-choice questions, EKGs and radiology images. The blog content voted to be most useful for educational purposes included EKGs, critical care pearls and ultrasound pearls.

Conclusions: Of those who responded to the needs assessment, attitudes toward educational social media resources were favorable, with the majority already utilizing these resources for educational purposes or expressing an interest in doing so.

53 Teaching EPA 10: A Simulated Clinical Experience Improves Novice Medical Student Knowledge and Comfort in Recognizing Patients Requiring Emergent Care

Nelson A, Vahali S, Kornegay J, Yarris L / Oregon Health & Science University, Portland, OR

Background: Core entrustable professional activities (EPAs) are workplace activities that the AAMC has proposed all students should be prepared to perform upon entering residency. Emergency physicians are uniquely prepared to teach and assess EPA 10: “Recognize a patient requiring urgent or emergent care and initiate evaluation and management.”

Objectives: We hypothesized that implementing EPA 10 simulation training for novice medical students would be feasible, acceptable to learners, and increase self-reported comfort with EPA 10 functions.

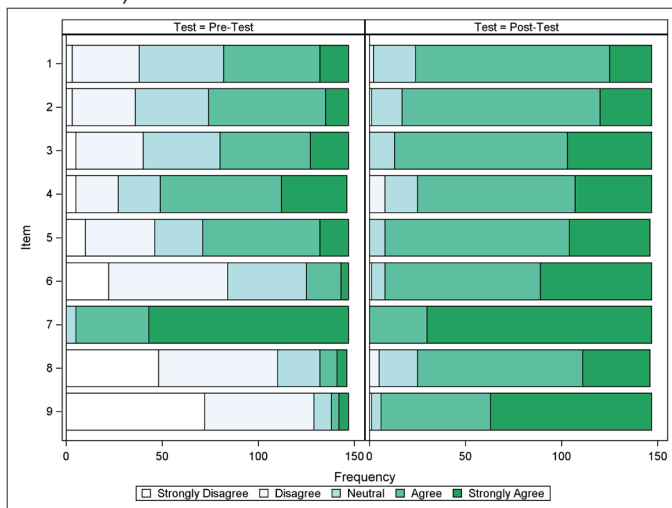
Methods: All first year medical students (n = 147) participated in an EPA 10 training course within two weeks of matriculation in an observational, cross-sectional study. A week prior to the course, students attended a 2-hour introduction to EPA concepts. The course included a 20-minute introduction covering course objectives: performing an “AMPLE history,” assessing an unconscious patient, completing a primary survey, and performing closed-loop communication in critical situations. Students completed four low-fidelity simulation stations, including: (1) a case-based vital signs module, (2) a standardized patient encounter involving altered mental status after syncope, (3) a simulated trauma patient evaluation after a fall, and (4) a team-based

learning scenario designed to teach and assess closed-loop communication when caring for a pulseless patient. All students completed pre- and post-intervention surveys prompting them to define an EPA and report their comfort performing EPA 10 functions.

Results: Descriptive statistics were collected for each item. Wilcoxon rank-sum tests were used to test for a significant difference in pre- and post-intervention responses for each item. 147/147 responses were collected (100% response rate). Students reported improvement in comfort in all nine EPA 10 related functions (Figure). Free text comments revealed that learners enjoyed the simulation experience, felt safe in the training environment, and reported increased awareness of their roles and limitations as providers.

Conclusions: Novice medical students who completed simulated clinical cases reported increased comfort with functions directly related to entrustment for EPA 10. This training was feasible to implement and well-received by learners.

Figure. Bar chart of pre- and post-training responses by item (listed below).



1. As a medical student I feel comfortable being a first responder in my community.
2. I can be trusted to determine when someone is sick and needs additional medical care immediately.
3. I know how to recognize abnormal vital signs.
4. I know how to apply basic life support principles.
5. I have a strategy for assessing an unconscious patient.
6. I can apply the elements of closed-loop communication as a member of a medical team.
7. I feel comfortable asking for help (calling 911 or activating a rapid response team or a code team) when a patient needs more care than I can offer.
8. When assessing a trauma patient I know how to complete a primary survey.
9. I can define the components of the AMPLE history.

Greenville, NC

Background: Teamwork and communication issues have been described as the most common contributing factor to medical errors and adverse events. Despite this, few medical or nursing schools incorporate formal interprofessional team training into the curriculum. Nursing and Medicine Faculty collaborated to design a Transition to Practice simulation curriculum for senior medical and nursing students focused on interprofessional teamwork and communication skills using a modified TeamSTEPPS program.

Objectives: This study attempted to determine if there was an improvement in self-assessment and trained expert assessment of students' teamwork behavior from pre and post TeamSTEPPS clinical simulation cases.

Methods: Medical and nursing students in Pre and Post intervention groups were compared, but all students received the identical educational intervention on the day between simulated cases. Using the first group of students was used as the control group prior to the educational intervention. Using a validated TeamSTEPPS teamwork assessment, teamwork skills were assessed by students and trained faculty. Statistics used Chi Square Analysis with significance defined as $p < 0.05$.

Results: 76 medical students participated in the study. Trained faculty assessment demonstrated significant improvement in the teamwork subscales of mutual support ($p=0.009$) and communication ($p=0.021$). When comparing post test of students vs faculty assessment, faculty saw significant improvement in communication ($p=0.05$).

Conclusions: TeamSTEPPS training significantly improved faculty assessment of teamwork skills in the communication and mutual support subscales that could be useful to improve teamwork and patient care. However, students in the post educational intervention group did not demonstrate higher self-assessment scores compared to the pre-intervention group. Limitations include multiple faculty assessors and unbalanced student teams that may skew assessment.

55 The CORD-EM Speaker Evaluation Form

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Background: No formal, validated speaker evaluation form currently exists to help conference planners make future decisions on speakers.

Objectives: Create a concise, effective evaluation form to be filled out by audience members to aid conference planners.

54 TeamSTEPPS in Clinical Simulation Cases

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