

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Medical Student Educational Experiences and Completion of Learning Objectives in the Emergency Department

Permalink

<https://escholarship.org/uc/item/5cx0d3cd>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 19(4.1)

ISSN

1936-900X

Authors

Murray, C T
Shenvi, C L

Publication Date

2018

Copyright Information

Copyright 2018 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Objectives: We aim to identify LM features that would optimize acceptance and use by medical students.

Methods: We implemented LM at a tertiary care emergency department that hosts an emergency medicine residency and medical student clerkships. Students who rotated in our department from August 2016 to April 2017 were sent email invitations to participate in our study. We employed the System Usability Scale (SUS) questionnaire, a validated, industry standard to evaluate the usability of LM. We interviewed participants and analyzed their transcripts using standard qualitative methods to understand what features promoted LM’s acceptance and use.

Results: Thirty participants out of 70 invited completed the SUS questionnaire. LM’s aggregate score was 80.9, placing it in the top 10th percentile for ease of usability when benchmarked against other websites. Roughly 50% of students indicated that they would use the website frequently for learning purposes.

We conducted 13 interviews between January and March 2017. Three themes emerged from the interviews as features that optimized acceptance and adoption of LM. 1) Maximal simplicity in interface design and ease of use were key factors in student engagement. 2) The compatibility of LM’s concept with students’ personal learning preferences affected perceived usefulness. 3) Department-wide acceptance of LM by faculty and residents encouraged adoption into student workflow. Themes were shaped by students’ time scarcity, competing priorities, and availability of more traditional learning resources.

Conclusions: Maximal simplicity and ease of use, compatibility with individual learning styles, and multi-level community engagement impacted the acceptance and adoption of LM by medical students. Our results inform future design and implementation of new online asynchronous learning educational technologies such as LM.

Table 1. Participant survey responses.

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Would frequently use website	7%	17%	30%	43%	3%
Website was simple	3%	0%	3%	60%	33%
Website was easy to use	3%	0%	0%	57%	40%
Can use website without technical support	7%	0%	0%	13%	80%
Website functions were well integrated	3%	0%	10%	60%	27%
Website was consistent	3%	3%	7%	53%	33%
People will learn to use website quickly	3%	0%	0%	37%	60%
Website was very intuitive	3%	0%	3%	40%	53%
Confident using this website	3%	0%	3%	37%	57%
Can use website without learning anything new	3%	3%	0%	20%	73%

25 Medical Student Educational Experiences and Completion of Learning Objectives in the Emergency Department

Murray C, Shenvi C, /University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Background: The Emergency Department (ED) provides a unique learning environment in which medical students can gain experience with managing acute, undifferentiated patients. However, the fast-paced nature of the ED and preceptor variation limits standardized teaching. In order to optimize students’ educational experiences we sought to better understand with whom and where teaching occurs under our current clerkship design.

Objectives: Identify the most effective educational interactions for 4th-year medical students during their ED rotation, specifically comparing shifts in which they worked primarily with residents or with faculty.

Methods: This is a prospective study of procedure cards and surveys submitted by medical students as part of their month-long 4th year clinical rotation in the ED between 05/2017 and 11/2017 at a tertiary care academic ED. Students marked which topics or procedures they had reviewed, and who had precepted them. In an exit survey, students were asked to rate how often they received individualized teaching and whether their educational goals were met when working with residents and attendings on a 10 point Likert scale. Qualitative and quantitative data were collected anonymously with IRB exemption.

Results: Shift card data was collected from 41 students. Attendings tended to precept visual diagnostics while residents tended to teach technical procedures. Twenty-two students completed the exit survey. Results showed that students felt they received individualized teaching from both attendings and residents (7.9 and 8.1 respectively, $p = 0.066$). Students felt their goals were met more when reporting to the residents than attendings (8.7 and 7.7 respectively, $p = 0.045$). Themes noted in the open-ended portion of the survey were that students wanted more individualized experiences with the attendings, and requested more dedicated teaching shifts.

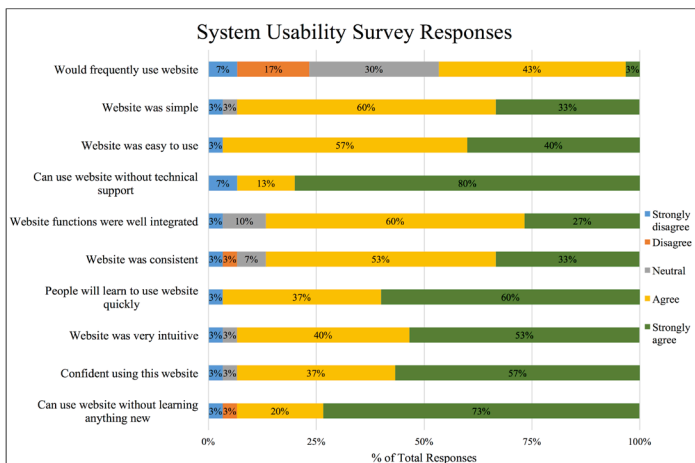
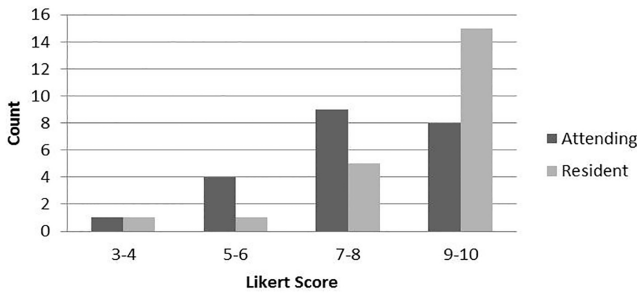


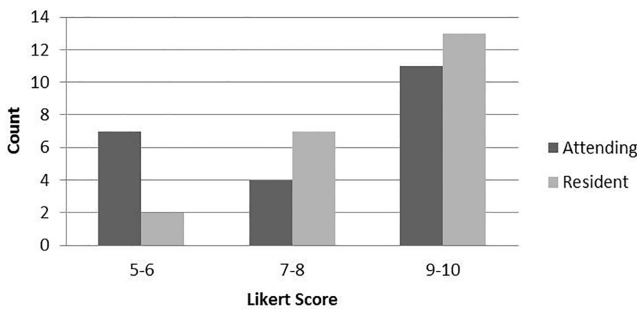
Figure 1. Participant survey responses.

Conclusions: 4th Year medical students in the ED felt they received individualized teaching on most shifts. However, they reported their education goals were met more often when working with residents. From this, we plan to foster additional resident-student interaction and further train residents in bedside teaching. Overall, a larger sample size as well as input from preceptors are needed to further optimize ED education.

Rating of Individualized Teaching on Shift with Attending and Residents



Rating of Learning Goal Achievement on Shift with Attending and Residents



26 Onboarding of Mental Health Resource in Emergency Medicine Residency Programs

Swisher L, Tabatabai R, Brown M, /Drexel University College of Medicine, Philadelphia, Pennsylvania; Los Angeles County USC Medical Center, Los Angeles, California; University of Tennessee-Murfreesboro/ Nashville, Murfreesboro, Tennessee

Background: In accordance with the emphasis on resident well-being, a June 1, 2017 ACGME e-communication from Dr. Tom Nasca recommended “orientation on-boarding” as a targeted strategy to provide information on prevention, treatment and emergency resources for medical and mental health issues. At this time, there is no information regarding if or how EM programs institute wellness onboarding.

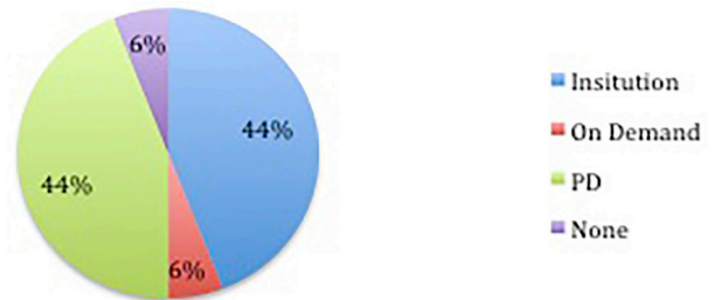
Objectives: To identify the type of mental health

resources and the mechanism of information dissemination which individual EM programs currently employ.

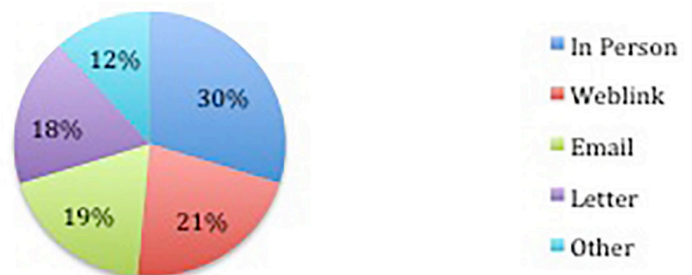
Methods: A request to participate and survey link was sent to program directors through the CORD program director listserv. The 7-item Qualtrics survey contained questions on process and format of wellness resource distribution to the residents. A specific request to attach residency specific wellness letters was made.

Results: There were 73 survey responses from 239 EM programs. Although 90% of the programs provided mental health resources during orientation, 10% did not. In providing mental health resources, 72% provided the information automatically, 25% provided the information on request and 3% did not provide mental health resources. Resources were provided by the sponsoring institution (46%), the program director during a designated session (42%) and on-demand only (6%). No mental health resources were given out by 6% of the respondents. Mental health resources were most commonly delivered in an in-person session (28%) or a weblink (20%),

Conclusions: Although more than 90% of responding program directors provided mental health resources during orientation, the small number of respondents casts doubt on the true incidence of mental health onboarding in EM programs. In greater than half of our responses, the sponsoring institution (rather than individual programs) more commonly provides this information. Given the July 2017 ACGME program requirements on wellbeing, it was surprising that 6% of the respondents did not know of any mental health resources being distributed to their residents.



Method of Mental Health Resource Distribution



Wellness Resource Distribution Format