UC Irvine

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

Title

Developing a Telehealth checklist using the Modified Delphi Method

Permalink

https://escholarship.org/uc/item/8ht443d9

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 21(4.1)

ISSN

1936-900X

Authors

Joshi, Aditi Silvas, Kanan Chandra, Shruti

Publication Date

2020

Copyright Information

Copyright 2020 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/

18 Correlation of Attending and Patient Assessment of Resident Communication Skills in the Emergency Department

Lewis J, Balaji L, Grossestreuer A, Rosen C, Dubosh N / Beth Israel Deaconess Medical Center/Harvard Affiliated

Background: Communication and interpersonal skills are one of the ACGME's six core competencies. Valid methods for assessing these are lacking. Various communication assessment tools have been developed, including those from faculty and patient perspectives. How these different assessors compare is unknown.

Objectives: The goal of this study was to determine the degree of agreement between attending and patient assessment of resident communication skills. We hypothesized that the two measures would have substantial agreement.

Methods: This was a retrospective analysis of a prospectively collected dataset of EM residents at an academic medical center. From July 2017 – June 2018, residents were assessed on communication skills during their emergency department shifts by both patients and EM faculty. Patients completed the Communication Assessment Tool (CAT), a validated 14-item questionnaire based on a 1-5 Likert scale. Faculty rated residents' communication skills with patients, colleagues, and nursing/ancillary staff using a 1-5 Likert scale. We calculated mean CAT score and mean faculty ratings for each resident. Means were divided into tertiles due to nonparametric distribution of scores. Agreement between CAT and attending ratings of residents were measured using Cohen's Kappa for each attending evaluation question. Scores were weighted to assign adjacent tertiles partial agreement.

Results: During the study period, 952 CAT questionnaires and 1097 faculty evaluations were completed for 26 residents. CAT scores and attending evaluation of patient communication (k 0.21), communication with colleagues (k 0.21) and communication with nursing/ancillary staff (k 0.26) showed fair agreement.

Conclusions: There is fair agreement of patient and faculty ratings of EM residents' communication skills. The use of different types of raters may be beneficial in assessing trainees' communication skills.

19 Defining "Service over Education" by Emergency Medicine Residents

Obr B, Takacs M, Barlow P, Runde D / University of Iowa Hospitals and Clinics

Background: The ACGME Annual Program Evaluation is provided to resident trainees nationwide. One question asks the extent to which a resident's program values "Service over Education" (SOE). EM residency programs generally perform

poorly on this metric, though the understanding of what constitutes SOE is not well understood.

Objectives: To assess EM resident perceptions of what is meant by the term "service over education" as it relates to the annual program evaluation survey. To better understand resident perceptions of what it means to define service over education, we sought structured input from EM residents nationwide.

Methods: This study was survey-based. The study population included residents currently enrolled in a CORD-affiliated EM residency. The survey was provided via the CORD listserv in October-November, 2017. Resident responses constitute a convenience sample. This included a question regarding the extent residents felt their program prioritized SOE and a question requesting examples of what prioritizing SOE means to them. These responses were coded separately for thematic analysis and analyzed.

Results: 390 residents completed at least a portion of the survey. 43% of respondents reported their program prioritized service over education half the time or more. 263 provided comments of what prioritizing service over education meant to them. Initial thematic agreement was achieved on 87% of resident responses and the remaining 13% of differences were resolved through consensus discussion. 10 significant themes were identified, the four most common being: prioritizing clinical throughput over education (67%); deprioritizing educational opportunities (24%); altruistically putting the needs of the patient over education (15%); and obligations to offservice rotations (14%).

Conclusions: Residents have a varied understanding of what it means to prioritize "service over education", and more than 40% felt it occurred in their program. The ability of educational leaders to understand these perceptions may help them better educate residents and assess feedback from the ACGME survey.

20 Developing a Telehealth Checklist Using the Modified Delphi Method

Joshi A, Silvas K, Chandra S / Thomas Jefferson University; JeffConnect; Allegheny Health Network Internal Medicine

Introduction: Telehealth, using technology for remote patient encounters in healthcare, has been growing as a care modality. While it continues to advance, training and medical education has not kept pace. The authors perform on-demand EM visits with residents; however, standardized evaluation strategies do not exist.

Objective: Our objective was to create a telehealth checklist to evaluate telehealth visits using the Modified Delphi method.

- 1. Evaluate the current state of telehealth education and training
- 2. Create a telehealth checklist with an expert committee using the modified delphi method
- 3. Utilize created checklist to evaluate telehealth visits in

graduate medical education in future studies

Methods: Experts in telehealth and education were defined as working at an education institution teaching both undergraduate and graduate medical education, had an active telehealth program, and had students and residents working and using telehealth at their institution. Those fitting the description were approached by a team at Thomas Jefferson and invited to be in the working group. Participants were confirmed and group was created in May 2019. Over the next 3 months, the group went through a modified Delphi method and repeated iterations to create a 15 point checklist.

Results: Eighteen experts were approached and 9 accepted to be part of the working group. Each member participated in 4 rounds. Round 1 included free responses to 'anything thought to be necessary to include in a checklist for an observer to evaluate a telehealth provider over video'. Round 2 asked participants to rank all entrants as 'must have' 'neutral' or 'remove'. Any answer with 80% removal recommendation did not continue on to round 3. Round 3 used the same format. Round 4 asked for participants to pick their top 15 of remaining answers to be in the checklist. The team removed answers that were redundant, and then compiled and ordered the answers for flow. The resulting checklist had 15 points.

Conclusion: Using a modified Delphi method, 9 experts were able to come to consensus on a telehealth visit checklist. Our next step will be a multicenter validation of the checklist with residents and for future use in telehealth education.

- Confirms the provider is using a secure, HIPAA compliant video conferencing platform
- Confirms adequate audio and video quality by confirming patient and provider can both hear and see each other
- Provider is clear on what can/can't be done over telehealth
- Confirms appropriate background environment including background, lighting and confidentiality
- Reviews any specific concerns regarding telemedicine consent
- If provider needs to turn away, informs patient of it (needing to look at chart, pictures, etc)
- Keeps eye contact with camera at eye level so provider appears to be looking at patient
- If there is technical difficulty, provider provides some basic troubleshooting (turning camera and mic on/off, changing browser, inputting information)
- If tech issues cannot be resolved, provider reaches out to tech support
- Demonstrates the ability to adjust/zoom the camera to visualize area of complaint
- Guides patient through self-administered physical exam with equipment available
- Asks to make observation of patient's home/environment for confidentiality and patient care as needed
- Provider has plan for emergencies call 911, provide patient location, or refer to closest ER/UC
- Follows current national, state, and institutional policies on controlled substance prescription through telemedicine visits
- Provider appropriately disconnects from the visit and signs off (doesn't just hang up)

Figure 1. Telehealth Checklist for Simulation Cases

Table 1:Telehealth Checklist Consensus Committee Members.

Name	Title	Institution
Bart Damerschalk MD, MSc, FRCPC	Professor of Neurology Medical Director of the Center for Connected Care	Mayo Clinic College of Medicine & Science
Emily Hayden MD, MHPE	Director of Telemedicine Department of Emergency Medicine	Massachusetts General Hospital
Aditi Joshi MD, MSc	Medical Director, JeffConnect Assistant Professor, Department of Emergency Medicine Associate Director, Digital Health Scholarly Inquiry	Thomas Jefferson University Hospital Sidney Kimmel Medical College
Mark Lo MD, MS	Pediatric Emergency Medicine Medical Director, Telehealth and Digital HealthI Clinical Associate Professor of Pediatrics	Seattle Children's Hospital University of Washington School of Medicine
Neel K. Naik MD	Director of Emergency Medicine Simulation Education Attending Physician of Emergency Medicine	New York Presbyterian Weill Cornell Medicine
Dana Schinasi MD	Attending Physician, Pediatric Emergency Medicine Medical Director, Telehealth Programs	Ann & Robert H. Lurie Children's Hospital of Chicago Northwestern University Feinberg School of Medicine
Neal Sikka MD	Co-Chief, Section of Innovative Practice Associate Professor of Emergency Medicine	George Washington University
Eric Wallace MD, FASN	Associate Professor of Medicine UAB Medical Director of Telemedicine Associate Fellowship Program Director	University of Alabama at Birmingham
Jeremy Young MD, MPH	Assistant Professor of Clinical Medicine Director, ID Fellowship	University of Illinois- Chicago

21

Do Gender, Age, and Seniority Affect Resident Assessments of Emergency Medicine Teaching Faculty?

Dubey E, Meram S, Liu T, Reed B, Smylie L, Paxton J / WSU Detroit Medical Center; Wayne State University

Objective: This study aimed to determine whether quantitative competency scores of faculty member performance, as judged by categorical EM residents, appear to be influenced by the gender, age or seniority of the faculty member being assessed.

Methods: Teaching assessments completed by categorical EM residents at two high-volume urban, teaching hospitals over a period of 5 years were reviewed. Survey questions addressed five