UC Irvine

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

Title

Defining Emergency Medicine Residency Training Outcomes Using Delphi Method

Permalink

https://escholarship.org/uc/item/3vw6k5p4

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 17(4.1)

ISSN

1936-900X

Authors

Peterson, W Khandelwal, W Edens, MA et al.

Publication Date

2016

Copyright Information

Copyright 2016 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/

12 Cultural Competency Training in Emergency Medicine

Mechanic O, Dubosh N, Rosen C, Landry A / Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

Background: The Emergency Department is widely regarded as the epicenter of medical care for diverse and largely disparate types of patients. Physicians must be aware of the cultural diversity of the patient population they care for to appropriately address their medical needs. A better understanding of residency-preparedness in cultural competency education can ultimately lead to better training opportunities and patient care.

Objectives: The objective of this study is to assess residency and faculty exposure to formal cultural competency programs and future plans for diversity education.

Methods: A short survey was sent to all 168 ACGME program directors through the Council of Emergency Medicine Residency Directors (CORD) listserv. The survey included drop-down response options in addition to openended input. Descriptive and bivariate analyses were used to analyze the data.

Results: The preliminary response rate is 25.0%. Results show that 73.8% of residency programs include cultural competency in residency didactics. Only 12.2% of these programs include residency education on all topics of interest, including race and ethnicity, gender identity and sexual orientation, patients with limited English proficiency (LEP), and social determinants of health. 40.5% of programs have training for faculty, primarily utilizing lectures or didactics. 95.2% of programs are interested in a universal open-source cultural competency curriculum.

Conclusions: Most programs have made efforts to better resident education in regards to cultural competency. Some faculty members also receive cultural competency instruction through didactics or lectures. There are gaps, however, in types of cultural competency training and many programs have expressed interest in a universal open-source tool to improve cultural competency for Emergency Medicine residents.

13 Current Practice In The Transitions Of Care For Patients Discharged From The Emergency Department

Rider A, Wroe W, Schmitz G, Kessler C, Smith M, Lo B, Gross E /Highland Hospital, New Orleans, LA; UT San Antonio, San Antonio, TX; UT San Antonio, San Antonio, TX; VA North Carolina, Asheville, NC; Ochsner Health System, New Orleans, LA; Eastern Virginia Medical School, Norfolk, VA

Background: Emergency physicians (EP) and primary care physicians (PCP) believe that the transition of care to the outpatient setting is important. However, limited data exist discussing transitions of care from the emergency department (ED) to the primary care setting (PCS).

Objectives: To characterize the current practices in the transition of care of patients from the ED to the PCS.

Methods: This was a prospective survey based on literature review and modified Delphi technique. A pilot survey was initially created to evaluate for face and content validity. This survey was then administered at 8 different clinical sites. A total of 52 EP and 49 PCP were surveyed in a variety of clinical settings. A qualitative analysis was performed by 2 independent coders who classified answers by pre-defined themes (IRR > 80%). Participant's answers could cross several pre-defined themes within a given question. If a discrepancy occurred, the reviewers discussed to achieve consensus. Chi-square was performed between the two groups.

Results: Seventy five percent of ED and PCP felt the most important reason for communication was to establish follow up (44/52 EP vs 28/49 PCP, P = 0.002), followed by 46% who felt communication was necessary to assist with management of the patient's condition and disposition (31/52) EP vs 16/49 PCP, P = 0.006). Similarly, 92% of respondents reported improved patient care as the most important reason for EP to communicate with PCP. Fifty-seven percent of PCP felt they should be notified by the ED > 80% of the time, whereas 87% of EP reported notifying the PCP < 20% of the time. When discussing barriers to effective communication, 50% of participants stated communication logistics (34/52 EP vs 17/49 PCP, P = 0.002), followed by 47% who felt setting/ environmental constraints (28/52 EP; 20/49 PCP, P = 0.19), and 31% who stated suboptimal electronic medical records (11/52 EP vs 21/49 PCP, P = 0.019).

Conclusions: PCP and EP were congruent when asked about the circumstances and the importance for communicating follow up after a patient had visited the ED. The majority of PCP felt they should receive communication from the ED for follow up, however the vast majority of EP reported they did not. Communication logistics was the most frequent barrier cited by both EP and PCP. Further research should focus on overcoming barriers to communicating between EP and PCP.

1 4 Defining Emergency Medicine Residency Training Outcomes Using Delphi Method

Peterson W, Khandelwal S, Edens M, Shah K, Doty C, Hopson L /University of Michigan, Ann Arbor, MI; Ohio State University, Columbus, OH; Louisiana State University, Shreveport, LA; Mt. Sinai School of Medicine, New York, NY; University of Kentucky, Lexington, KY

Background: Every year, medical students compare residency training programs and develop their personal rank list in preparation for Match Day. There are multiple factors that are considered in the decision, including overall program quality. Despite external sources attempting to define program quality, EM as a specialty has not defined training outcomes that are most valued.

Objectives: The purpose of this study is to develop consensus on metrics for residency training outcomes for EM residency programs through engagement with multiple stakeholders in the training process. This will allow standardized program assessment and research practices.

Methods: We performed a comprehensive literature review and assembled a list of potential residency training outcomes. We then assembled a Delphi panel consisting of 32 participants whose roles were: attendings with medical education leadership positions (15), deans or department chairs (3), recent residency graduates (3), current residents (6), and medical students (5) from multiple different institutions to investigate consensus on these outcomes through two rounds of a modified Delphi protocol using a web-based survey instrument.

Results: Round 1 response rate was 100% (32/32) and Round 2 was 25/32 (78%). Of the initial 49 possible residency training outcomes, 35 were removed after round 1 due to low agreement on importance of the outcomes, 4 moved on to round two in medium agreement category, and 10 moved on to round two in high agreement. Of the 14 that moved on to round 2, consensus with a high level of agreement was achieved on 10 outcomes.

Conclusions: Our study found consensus support by our Delphi panel for a list of 10 outcomes relevant to standardized assessment of an EM residency program. These findings are useful for development of a standardized reporting method for evaluation by prospective residents as well as those evaluating training outcomes or graduates of a program.

Table 1. Final High Agreement Outcome Metrics for Residency Programs.

Outcome	Level of Agreement
Average Number of Adult Medical Resuscitations per Graduating Resident	High (Mean 4.52)
Average Number of Adult Trauma Resuscitation per Graduating Resident	High (Mean 4.40)
Average Number of Pediatric Medical Resuscitations per Graduating Resident	High (Mean 4.40)
Average Number of Pediatric Trauma Resuscitations per Graduating Resident	High (Mean 4.36)
Board Pass Rates for Past 5 Years	High (Mean 4.72)
Number of Months in the Standard Curriculum of Critical Care	High (Mean 4.12)
Number of Months in the Standard Curriculum of Pediatrics & Pediatric EM	High (Mean 4.20)
Number of Months in the Standard Curriculum of ED Months	High (Mean 4.36)
Program Accreditation Status	High (Mean 4.72)
Complete Residency Block Curriculum	High (Mean 4.20)

15 in a Boot Camp Simulation Curriculum for Emergency Medicine Interns

Parsons J, Griswold-Theodorson S, Pasirstein M, Erbayri J, Nocera R / Drexel University College of Medicine, Philadelphia, PA

Background: Residency programs are increasingly implementing intensive, preparatory courses prior to patient care to ease the transition from medical school to residency. These "boot camps" have demonstrated increased confidence and procedural competence of new interns, but few studies have evaluated a boot camp's ability to teach non-technical skills (NTS) such as leadership, problem solving, communication, teamwork, situational awareness, and resource utilization. The Drexel Emergency Medicine (EM) boot camp curriculum was designed to improve medical knowledge and procedural skills, and also allow for deliberate practice of the NTS required of EM physicians.

Objectives: This study aimed to improve NTS of new interns through an intensive boot camp simulation curriculum.

Methods: This was a prospective cohort study using a convenience sample of fifteen EM interns in June and July of 2015. All interns were given a short didactic presentation of the principles of NTS and then divided into three teams to participate in 9 simulation scenarios during the boot camp. Following each simulation scenario, teams were debriefed on both the medical management and the NTS required during the case. Initial and final simulation scenarios during the boot camp were observed and scored by two independent raters using a previously validated assessment tool, the Ottawa Crisis Resource Management Global Rating Scale (GRS). A paired t-test compared initial and final NTS performances during the boot camp. The interns also completed a survey to self-assess their improvement in NTS.

Results: Results demonstrated a statistically significant improvement in overall NTS, leadership, problem solving, communication, teamwork, and resource utilization skills (Figure 1). Communication skills had the highest rate of improvement, with initial average team scores of 3.5 increasing to 6.5 on the seven point GRS (p<0.001). The inter-rater reliability was Kappa = 0.5851, 95% CI (0.4844, 0.6858). Self-assessed improvement in NTS also showed that the interns believed all domains of NTS improved, with communication again having the highest degree of improvement (Figure 2).

Conclusions: Critical communication and other NTS can be improved over the course of a two-week boot camp through a simulation boot camp curriculum.