

UC Irvine

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

Title

Improving Critical Care Documentation and Coding Using an Online Teaching Module

Permalink

<https://escholarship.org/uc/item/9qv203qm>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 18(5.1)

ISSN

1936-900X

Authors

Hartstein, G
Habboushe, J
Muckey, E
et al.

Publication Date

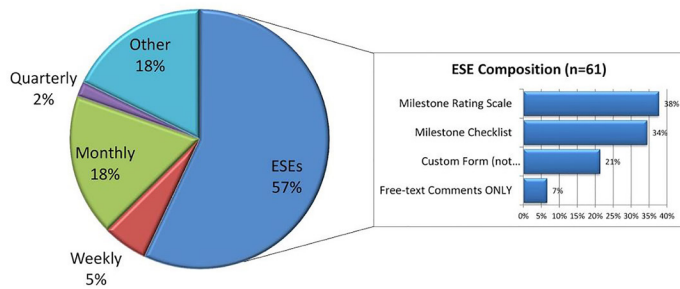
2017

Copyright Information

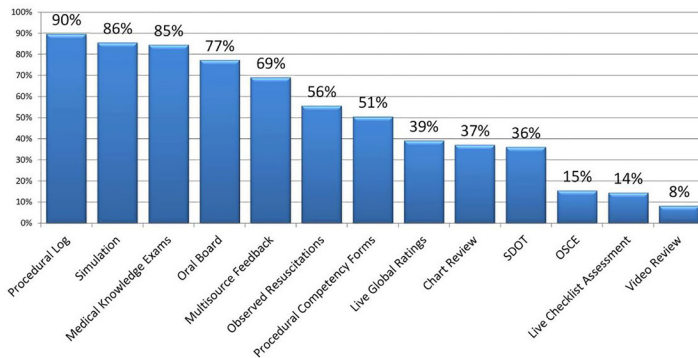
Copyright 2017 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Frequency of Evaluation

(n=107)



Other Evaluation Tools Utilized (n=97)



25 How do Emergency Medicine Residencies Structure Trainees' Administrative Experience: A Survey

Williamson K, Branzetti J, Cheema N, Aldeen A / Advocate Christ Medical Center, Oak Lawn, IL; University of Washington, Seattle, WA; University of Chicago, Chicago, IL; Presence St. Joseph, Joliet, IL

Background: While the Accreditation Council for Graduate Medical Education (ACGME) mandates that emergency medicine residencies provide an educational curriculum that includes administrative seminars and morbidity and mortality conference, there is significant variation as to how administrative topics are implemented into training programs.

Objectives: No best practices exist for emergency medicine resident administrative experience. We seek to determine the prevalence of dedicated administrative rotations and details about the components of the curriculum.

Methods: In this descriptive study, a 12-question survey was distributed via the CORD listserv in the winter of 2016. Each member program was asked questions concerning the presence of an administrative rotation and details about its components. These responses were then analyzed with simple descriptive statistics.

Results: A total of 114 of the 168 programs responded with complete information, leading to a 68% response rate. Of responders, 73% have a dedicated administrative rotation (95% CI 64.0 to 80.4). Of the programs with an administrative rotation (n=81), 56.8% (95% CI 45.9 to 67.0) had a 4 week rotation, 23.5% (95% CI 15.6 to 33.8) had a 2 week rotation, 9.9% (95%CI 5.1 to 18.3) had a three week rotation; the remaining programs had either one week rotations or longitudinal experiences. A majority of 61.7% of the programs with an administrative rotation dedicate this time in the third year (95% CI 50.8 to 71.6). The content areas covered by the majority of programs with a dedicated program include performance improvement (68), patient safety (n=64), ED operations (n=58), patient satisfaction (n=54), billing and coding (n=47), and inter-professional collaboration (43). Experiential learning activities include review of patient safety reports (n=66) and addressing patient complaints (n=45); only 40 programs report presenting a morbidity and mortality conference as part of the administrative experience. Most of the teaching on the rotation is either in-person (n=65) and/or self-directed reading assignments (n=48). The most commonly attended meetings during the rotation include performance improvement (n=60), ED operations (n=59), and ED faculty (n=44).

Conclusions: Most EM residencies offer a dedicated administrative rotation, but content, duration, and curricula vary significantly.

26 Improving Critical Care Documentation and Coding Using an Online Teaching Module

Hartstein G, Habboushe J, Muckey E, Wu T, Goldberg W, Femia R /New York Univeristy Langone School of Medicine, New York, NY; NYU School of Medicine, Ronald O Perelman Department of Emergency Medicine, New York, NY

Background: Emergency medicine professional reimbursement - in particular, the Evaluation and Management levels - is based on Medicare's rules defining the complexity of care. Services are only reimbursable if they are properly recorded. Therefore detailed documentation is essential for optimal compensation. Critical care follows a different set of rules than other Evaluation and Management levels and a lack of clinician awareness of these rules leads to incomplete documentation and under billing.

Objectives: The goal of this study is to:

1. Identify gaps in critical care documentation knowledge among emergency physicians.
2. Determine if these gaps can be filled via a self-administered online training module.
3. Determine whether improvement in knowledge can improve documentation and enhance reimbursement.

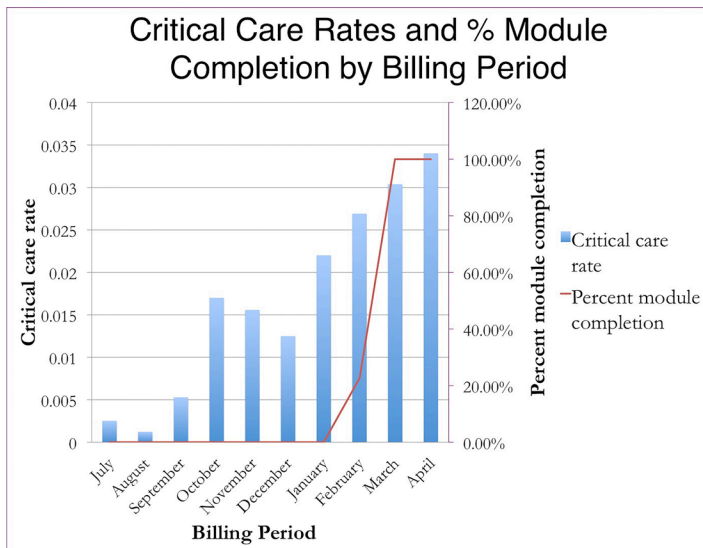
Methods: Critical care charts were examined in an

urban tertiary care center with approximately 68,000 ED visits per year. Pre-intervention, 1.2% of charts were coded as “critical care”; less than the national average of 2.5%. Physicians completed a pre-module assessment, followed by a 15-minute online educational module, followed by a post-module assessment. Critical care rates were measured during the months preceding and following module completion.

Results:

1. Gaps in knowledge were defined when average correct pre-assessment response was < 75%, revealing deficiencies in specific aspects of critical care documentation, which may be reflected in the critical care rate.
2. Post-module assessments had an overall higher correct response rate (65.9% to 84.8%, $p < 0.001$). Specifically for knowledge gap questions, the correct response rate increased from 53% to 86.5% ($p < 0.001$).
3. After all clinicians completed the teaching module, ED critical care rates increased from 1.4% (Nov-Dec, 2015) to 3.22% (Mar-Apr, 2016), an increase of 129% that trended towards statistical significance ($p = 0.058$). This extrapolates to an annual increase in reimbursement of \$103,900, based on the ED’s specific average collection rates.

Conclusions: The training module was able to identify and correct gaps in critical care knowledge, likely leading to an increase in proper charting and coding and a subsequent increase in revenue. Additionally, the effectiveness of a short, easily distributed teaching module carries broad implications for future physician education initiatives.



27 Improving General Surgery Resident Utilization and Confidence in Fast Exam with Emergency Physician Teaching

Wallace L, Kane D, Kim A/Washington University in St. Louis School of Medicine, St Louis, MO

Background: The Focused Assessment with Sonography for Trauma (FAST) has been utilized by Emergency Physicians (EPs) since the 1980s for rapid assessment of free fluid in the pericardial or peritoneal spaces. In addition, the FAST is part of the Advanced Trauma Life Support protocol developed by the American College of Surgeons. Unfortunately, the FAST may be underutilized, particularly by surgeons, due to lack of familiarity or lack of confidence in exams obtained by EPs.

Objectives: Our goal is to demonstrate that education of surgical residents by Ultrasound Fellowship trained EPs will increase understanding and familiarity with the exam, and will increase confidence in EP performed exams and EP trauma management.

Methods: This was a pre/post-intervention trial of FAST education of general surgery residents in an urban, tertiary-care Department of General Surgery by four Ultrasound Fellowship trained EPs. 22 PGY 1-2 residents participated in a convenience sampling based on clinical scheduling. Intervention consisted of didactic lectures and a multi-station teaching exercise using high-fidelity ultrasound simulators and a standardized patient. Both pre- and post-intervention, a questionnaire assessed confidence in performing and interpreting FAST exams, as well as attitudes toward EP performed FAST exam and EP trauma care. Responses were in the format of a 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Results: 36% (8/22) had not performed a FAST exam on a live patient pre-intervention. Average confidence in performing FAST exams increased significantly post-intervention, from 2.2 to 3.9. Participants noted improved likelihood of using EP obtained FAST in practice post-intervention, from 2.0 to 4.0. The intervention increased confidence in EP obtained FAST exams, from 3.7 to 4.2. Finally, surgery resident attitudes toward EP trauma care improved. Pre-intervention responses regarding EP capability of management of trauma patients averaged 3.8, increasing to 4.4 post-intervention. All results were statistically significant ($p < 0.05$).

Conclusions: Dedicated instruction by EPs leads to increased confidence with and utilization of the FAST exam by general surgery residents. It also increases residents’ confidence in FAST exams performed by EPs and improved attitude towards EP management of trauma patients overall.