

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.JournalofSurgicalResearch.com

Association for Academic Surgery

Evaluating the effectiveness of a mock oral educational program



Laura E. Fischer, MD, MS,^a Mara Snyder, MA,^b Sarah A. Sullivan, PhD,^b
Eugene F. Foley, MD,^b and Jacob A. Greenberg, MD, EdM^{b,*}

^aDepartment of Surgery, Oregon Health and Science University, Portland, Oregon

^bDepartment of Surgery, University of Wisconsin, Madison, Wisconsin

ARTICLE INFO

Article history:

Received 5 February 2016

Received in revised form

17 April 2016

Accepted 26 June 2016

Available online 5 July 2016

Keywords:

American Board of surgery

Certifying exam

Qualifying exam

Mock oral exam

ABSITE

Resident education

ABSTRACT

Background: To obtain board certification, the American Board of Surgery requires graduates of general surgery training programs to pass both the written qualifying examination (QE) and the oral certifying examination (CE). In 2015, the pass rates for the QE and CE were 80% and 77%, respectively. In the 2011-2012 academic year, the University of Wisconsin instituted a mandatory, faculty-led, monthly CE preparation educational program (CE prep) as a supplement to their existing annual mock oral examination. We hypothesized that the implementation of these sessions would improve the first-time pass rate for residents taking the ABS CE at our institution. Secondary outcomes studied were QE pass rate, correlation with American Board of Surgery In-Training Examination (ABSITE) and mock oral examination scores, cost, and type of study materials used, perception of examination difficulty, and applicant preparedness.

Methods: A sixteen question survey was sent to 57 of 59 residents who attended the University of Wisconsin between the years of 2007 and 2015. Email addresses for two former residents could not be located. De-identified data for the ABSITE and first-time pass rates for the QE and CE examination were retrospectively collected and analyzed along with survey results. Statistical analysis was performed using SPSS version 22 (IBM Corp., Armonk, NY). *P* values < 0.05 were considered significant.

Results: Survey response rate was 77.2%. Of the residents who have attempted the CE, first-time pass rate was 76.0% (19 of 25) before the implementation of the formal CE Prep and 100% (22 of 22) after (*P* = 0.025). Absolute ABSITE score, and mock oral annual examination grades were significantly improved after the CE Prep was initiated (*P* values < 0.001 and 0.003, respectively), however, ABSITE percentile was not significantly different (*P* = 0.415). ABSITE raw score and percentile, as well as mock oral annual examination scores were significantly associated with passing the QE (0.032, 0.027, and 0.020, respectively), whereas mock oral annual examination scores alone were associated with passing the CE (*P* = 0.001). Survey results showed that residents perceived the CE to be easier than the annual mock oral after the institution of the CE prep course (*P* = 0.036), however, there was no difference in their perception of preparedness. Overall, applicants felt extremely prepared for the CE (4.70 ± 0.5, Likert scale 1-5).

* Corresponding author. Department of Surgery, University of Wisconsin Hospital and Clinics, Madison, WI. Tel.: +1 608 263 1036; fax: +1 608 252 0942.

E-mail address: greenbergj@surgery.wisc.edu (J.A. Greenberg).
0022-4804/\$ – see front matter © 2016 Elsevier Inc. All rights reserved.
<http://dx.doi.org/10.1016/j.jss.2016.06.088>

Conclusions: Formal educational programs instituted during residency can improve resident performance on the ABS certifying examination. The institution of a formal, faculty-led monthly CE preparation educational program at the University of Wisconsin has significantly improved the first-time pass rate for the ABS CE. Mock oral annual examination scores were also significantly improved. Furthermore, ABSITE scores correlate with QE pass rates, and mock oral annual examination scores correlate with pass rates for both QE and CE.

© 2016 Elsevier Inc. All rights reserved.

Introduction

To obtain board certification, the American Board of Surgery requires graduates of general surgery training programs pass both the written qualifying examination (QE) and the oral certifying examination (CE). This certification indicates that the recipient has demonstrated adequate knowledge and clinical judgment regarding commonly encountered problems in general surgery. The QE is designed to test the participant's knowledge of basic science and surgical principles through an 8-hour, 300 multiple-choice question examination. The CE is an oral examination designed to test the participant's clinical judgment, decision-making, and management of common general surgery scenarios. The 90-minute examination is given in three 30-min rooms, with two examiners and four scenarios per room. The content of the CE is now aligned with the Surgical Council on Resident Education curriculum.¹ All surgeons must pass the QE before gaining permission to take the CE.

While passage of both the QE and CE are required for board certification, performance on the QE does not necessarily predict performance on the CE. Studies have found that while there was a relationship between QE and CE, that there is no predictive power to the QE score in determining CE performance.^{2,3} Thus, the QE and CE test different abilities: the QE tests surgical knowledge, whereas the CE tests the application of the knowledge to changing situations in a stressful environment. The CE is also important because it challenges a surgeon to demonstrate a professional demeanor under duress and to exhibit effective communication skills. Both the QE and CE are complementary to each other in terms of determining board certification.

In addition, board certification is an important requirement for general surgery residency program accreditation by the Accreditation Council for Graduate Medical Education (ACGME). The ACGME states that a program must "monitor and track...graduate performance, including performance of program graduates on the certification exam" (V.C.2.c). Specifically, the ACGME requires a minimum 65% first-time pass rate on both the QE and the CE for a program to maintain accreditation (V.C.2.c)(1).⁴

In 2015, the pass rates for the QE and CE were 80% and 77%, respectively. Over the last 10 y, there has been a considerable decrease in the CE pass rate with a nadir of 72% in 2012.⁵ With the institution of the 80-h work week, some programs have expressed concern at the decrease in the amount of time residents have to devote to education,^{6,7} although several studies have shown that there has been no documented decrease in objective examination scores.^{8,9} To combat this perceived deficiency in time and opportunity, many programs have enacted education programs evaluating various

methods of resident education to improve ABSITE, QE, and CE pass rates.^{7,10-17} Some authors have shown a significant increase in first-time CE pass rate with the institution of mock oral programs,^{10,11,13,14} whereas other have not been able to show significance but argue that the participants almost uniformly find it helpful to prepare.^{12,15,17,18}

In 2011, the University of Wisconsin instituted a mandatory, faculty-led, monthly CE preparation educational (CE Prep) program as a supplement to their existing annual mock oral examination. We hypothesized that the implementation of these sessions would improve the first-time pass rate for residents taking the ABS CE at our institution. Secondary outcomes studied were QE pass rate, correlation with ABSITE and mock oral examination scores, cost and type of study materials used, and perception of examination difficulty and applicant preparedness.

Methods

CE prep program

A monthly, faculty-led, mandatory CE Prep program was instituted in the 2011-2012 academic year. The dates, times, and session topics (Table 1) were determined at the start of the academic year and distributed to the residents. Faculties who

Table 1 – CE prep session topics.

| Month | Topic |
|-----------|---|
| July | Introduction to the certifying examination in general surgery |
| August | Esophagus |
| September | Stomach |
| October | Endocrine |
| November | Breast |
| December | Small/large intestine |
| January | Open for ABSITE review |
| February | Hepatobiliary |
| March | Trauma/critical care |
| April | Pancreas |
| May | Skin/soft tissue/head and neck |
| June | Vascular/miscellaneous |

A list of monthly topics covered during the CE prep educational program. These topics, in addition to the meeting dates and specialty faculty moderators, are distributed at the start of each academic year.

Download English Version:

<https://daneshyari.com/en/article/4299029>

Download Persian Version:

<https://daneshyari.com/article/4299029>

[Daneshyari.com](https://daneshyari.com)