

Interventions That Affect Resident Performance on the American Board of Surgery In-Training Examination: A Systematic Review

Roger H. Kim, MD, and Tze-Woei Tan, MD

Department of Surgery, Louisiana State University Health Sciences Center in Shreveport, Shreveport, Louisiana

OBJECTIVE: To systematically review the published literature on the effectiveness of interventions intended to improve residents' American Board of Surgery In-Training Examination (ABSITE) performances.

DESIGN: A systematic review was conducted by 2 independent investigators to identify all publications that examined the effect of specific interventions on residents' ABSITE performances from 1975 to 2013.

RESULTS: Overall, 26 published articles met study criteria. Structured reading programs and setting clear expectations with mandatory remedial programs were consistently effective in improving ABSITE performance, whereas the effect of didactic teaching conferences and problem-based learning groups was mixed. There was marked heterogeneity in the usage of study designs and reporting of results.

CONCLUSIONS: Structured reading programs and mandatory remedial programs appear to be consistently effective measures that can improve residents' ABSITE performances. There is a need for improved study design and reporting in future research conducted in this field. (*J Surg* 72:418-429. © 2015 Association of Program Directors in Surgery. Published by Elsevier Inc. All rights reserved.)

KEY WORDS: ABSITE, systematic review, surgical education, in-training examination, in-service examination, surgical residency

COMPETENCIES: Medical Knowledge, Patient Care, Practice-Based Learning and Improvement

INTRODUCTION

The in-service examination, formally designated as the American Board of Surgery In-Training Examination

Correspondence: Inquiries to Roger H. Kim, MD, Department of Surgery, Louisiana State University Health Sciences Center in Shreveport, 1501 Kings Hwy, P.O. Box 33932, Shreveport, LA 71130-3932; fax: (318) 675-6171; e-mail: rkim@lsuhsc.edu

(ABSITE), was established in 1975.¹ The examination is offered annually to all the Accreditation Council for Graduate Medical Education–accredited general surgery residency programs and is designed to serve as an evaluation instrument for program directors to assess the progress of their residents. In 2006, the format of the ABSITE was changed to create junior-level and senior-level versions for postgraduate years (PGY) 1 to 2 and PGY 3 to 5, respectively. For the junior level, 60% of the examination focuses on basic science and 40% on clinical management, whereas the senior level has 20% focus on basic science and 80% on clinical management. The junior-level and senior-level examinations also differ in their relative emphasis on clinical content categories.²

The ABSITE has been shown to have predictive value in assessing the likelihood of passing the American Board of Surgery (ABS) qualifying examination.² In addition, the ABSITE is considered a “high-stakes” examination, with resident performance often used for promotion or retention decisions during residency and for subspecialty fellowship applications.³⁻⁵ Because of this, there are many published reports on factors that may affect performance on the ABSITE. Of particular interest to program directors and surgical educators are studies that examine specific interventions designed to improve resident ABSITE performance. However, a systematic review of the literature on this topic has never been performed. The purpose of this article is to systematically review published literature to determine interventions that affect resident performance on the ABSITE.

METHODS

Independent PubMed searches to identify original articles published from January 1975 (the year of the establishment of the ABSITE) through December 2013 were conducted by 2 investigators. The [Figure](#) illustrates the search strategy. Overall, 3 search terms, “American Board of Surgery In-Training Examination,” “American Board of Surgery

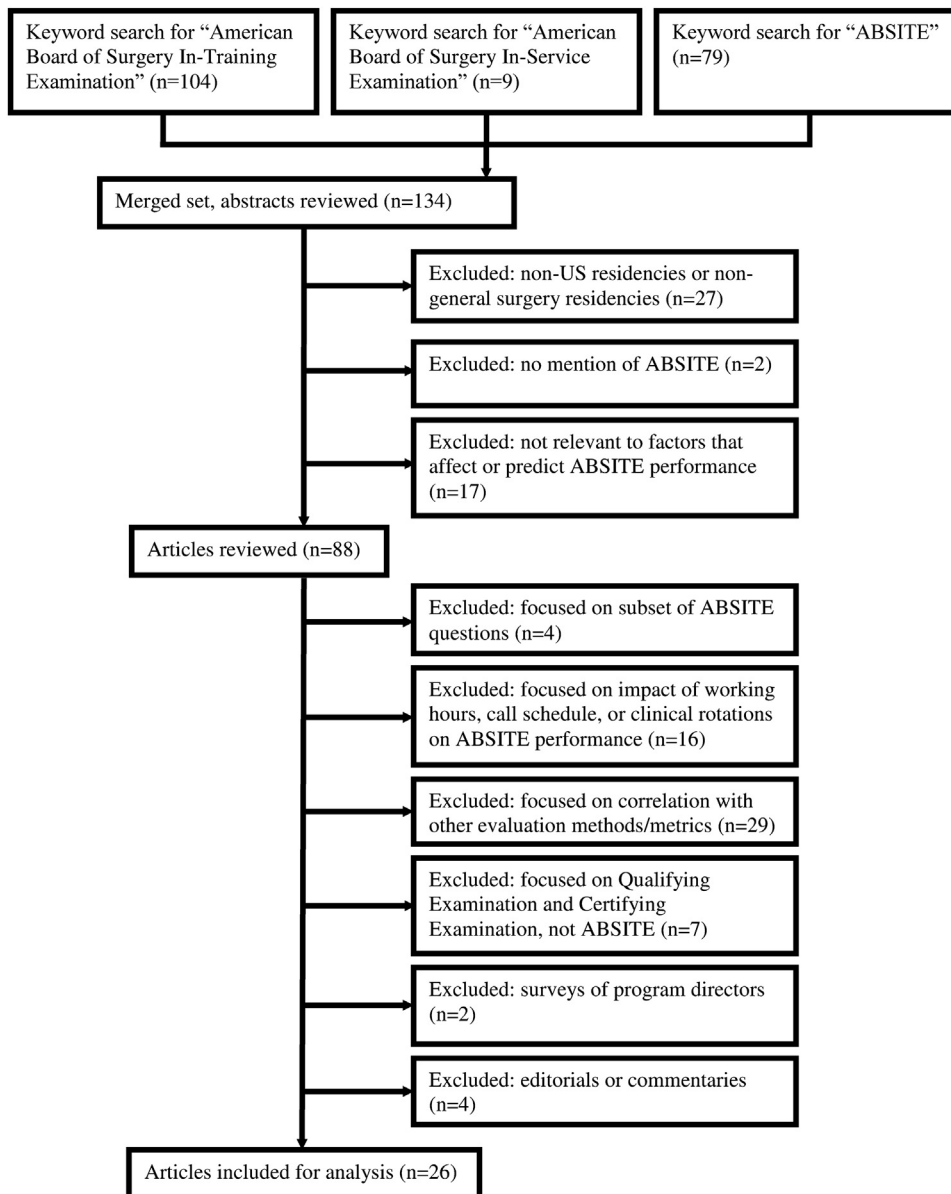


FIGURE. Search flowchart.

In-Service Examination,” and “ABSITE,” were used to identify potential articles. The abstracts of these articles were reviewed; 46 were excluded for the reasons listed in the [Figure](#). The remaining articles were reviewed. A total of 62 articles were excluded after independent review by both investigators. The reasons for exclusion are listed in the [Figure](#). The remaining 26 articles, which all examined the effect of specific interventions on residents’ ABSITE performances, were included for final analysis.

RESULTS

A total of 26 articles were reviewed in this study. Based on the primary intervention examined, the studies were

grouped into 1 of 5 categories: (1) studies examining the effect of structured reading programs, (2) studies examining the effect of didactic conferences, (3) studies examining the effect of problem-based learning (PBL) groups, (4) studies examining the effect of mandatory remedial programs, and (5) studies examining other interventions. Some studies examined interventions in multiple categories.

Overall, 8 studies examined the effect of structured reading programs on residents’ ABSITE performances.⁶⁻¹³ The design and major findings of these studies are summarized in [Table 1](#). The definition of a structured reading program was fairly consistent among studies; in all cases, the structured reading program involved weekly assignments of specific topics or chapters from a selected textbook in surgery, accompanied by regular multiple-choice examinations (MCEs). Most structured

Download English Version:

<https://daneshyari.com/en/article/4297749>

Download Persian Version:

<https://daneshyari.com/article/4297749>

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