2017 APDS SPRING MEETING

"Taking Training to the Next Level": The American College of Surgeons Committee on Residency Training Survey

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OBJECTIVE: The American College of Surgeons (ACS) appointed a committee of leaders from the ACS, Association of Program Directors in Surgery, Accreditation Council for Graduate Medical Education, and American Board of Surgery to define key challenges facing surgery resident training programs and to explore solutions. The committee wanted to solicit the perspectives of surgery resident program directors (PDs) given their pivotal role in residency training.

DESIGN: Two surveys were developed, pilot tested, and administered to PDs following Institutional Review Board approval. PDs from 247 Accreditation Council for Graduate Medical Education-accredited general surgery programs were randomized to receive 1 of the 2 surveys. Bias analyses were conducted, and adjusted Pearson χ^2 tests were used to test for differences in response patterns by program type and size.

SETTING: All accredited general surgery programs in the United States were included in the sampling frame of the survey; 10 programs with initial or withdrawn accreditation were excluded from the sampling frame.

PARTICIPANTS: A total of 135 PDs responded, resulting in a 54.7% response rate (Survey A: $n = 67$ and Survey B: $n = 68$). The respondent sample was determined to be representative of program type and size.

RESULTS: Nearly 52% of PD responses were from university-based programs, and 41% had over 6 residents per graduating cohort. More than 61% of PDs reported that, compared to 10 years ago, both entering and graduating residents are less prepared in technical skills. PDs expressed significant concerns regarding the effect of duty-hour restrictions on the overall preparation of graduating residents (61%) and quality of patient care (57%). The current 5-year training structure was viewed as needing a significant or extensive increase in opportunities for resident autonomy (63%), and the greatest barriers to resident autonomy were viewed to be patient preferences not to be cared for by residents (68%), liability concerns (68%), and Centers for Medicare and Medicaid Services regulations (65%). Although 64% of PDs believe that moderate or significant changes are needed in the current structure of residency training, 35% believe that no changes in the structure are needed. When asked for their 1 best recommendation regarding the structure of surgical residency, only 22% of PDs selected retaining the current 5-year structure. The greatest percentage of PDs (28%) selected the "4 + 2" model as their 1 best recommendation for the structure to be used. In the area of faculty development, 56% of PDs supported a significant or extensive increase in Train the Teacher programs, and 41% supported a significant or extensive increase in faculty certification in education.

CONCLUSIONS: Information regarding the valuable perspectives of PDs gathered through these surveys should help in implementing important changes in residency training and faculty development. These efforts will need to be pursued collaboratively with involvement of key stakeholders, including the organizations represented on this ACS committee. (J Surg Ed ▮:▮▮▮-▮▮▮. ©2017 Association of Program Directors in Surgery. Published by Elsevier Inc. All rights reserved.)

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COMPETENCIES: Patient care, medical knowledge, personal and communication skills, practice based learning and improvement, professionalism, system based practice

INTRODUCTION

The adequacy of the training of graduating general surgery residents has been a matter of concern for the surgical community over the past several years.[1] Multiple forces including duty-hour restrictions, reimbursement system constraints, technological advancements, and societal and medicolegal concerns have affected the training environment of young surgeons.[2] These factors have affected the ability of residents to experience graduated autonomy during residency training and have limited their exposure to the breadth and depth of surgically treated conditions that characterize the portfolio of general surgery as defined by the American Board of Surgery (ABS).[3] Perceptions of colleagues suggest a reduced readiness of graduating residents for fellowships or independent practice.[4] Some studies have also indicated that graduating residents lack confidence in their abilities to practice independently.[5,6]

In response to these ongoing concerns, the Division of Education of the American College of Surgeons (ACS) convened the Committee on Residency Training which included leaders from the ACS, the Association of Program Directors in Surgery (APDS), Accreditation Council for Graduate Medical Education (ACGME), and the ABS. The purpose was to define key challenges facing surgery training programs and to explore solutions. Committee members recognized the importance of understanding the perspectives of those surgeons most intimately involved in surgical education—the directors of surgical residency programs. The APDS is the professional organization of these surgeon educators and consists primarily of program directors (PDs) and associate PDs from approximately 250 ACGME-accredited surgery residency programs in the United States. These PDs were invited to participate in 2 surveys and share their perspectives regarding a number of the crucial areas that will help guide the conversation and define future directions.

MATERIAL AND METHODS

Survey Development

The "Taking Training to the Next Level" survey was developed by the ACS Committee on Residency Training and sought to better understand the perceptions of general surgery PDs in the following areas: (1) goals of surgery residency education, (2) proficiency-based training and advancement (curriculum allowing residents to advance from one level to the next at their own paces), (3) structured curricula, (4) faculty development, (5) resources of residency education, (6) areas of greatest need, (7) autonomy, (8) best practices, and (9) models for surgery residency.

The survey was developed based on a modified Artino et al.[7] framework, following a systematic process to identify gaps in the literature, review questions and responses following survey design guidelines, and pilot the survey before administration. The survey was pilot tested in April 2015, with 16 PDs and modified based on feedback. A second pilot test was conducted in January 2016, by 5 PDs, including expert reviews by content experts in surgery education. Once again, feedback from pilot testing was used to revise the surveys. Because of the number of topics to be addressed, survey items were ultimately split across 2 forms. Items on resources and the curricula were administered using Survey A; items on structural models for surgery residency were administered using Survey B. A number of common items were also administered across both surveys to increase the sample size (response distribution) and to check for potential sampling bias between surveys. To gather PD perceptions on the topic areas, survey items included nominal responses and ordinal responses using 5-point scales, which were subsequently dichotomized to facilitate interpretation and subgroup comparisons. Residency programs were randomly assigned to either Surveys A or B.

Sampling Strategy

Sampling of Participants

The ACGME registry (publicly available) of surgery residency programs was used as the sampling frame ($N = 247$ programs). The registry was also used to identify program contact information and accreditation status. The ACGME registry of surgery programs included 218 programs with "Continued Accreditation," 24 programs with "Continued Accreditation with Warning," 1 program with "Continued Accreditation without Outcomes," and 4 programs with "Probationary Accreditation." This registry was based on information available from the ACGME website, updated as of June 30, 2015, which listed a total of 257 programs. Programs with "Accreditation Withdrawn," "Initial Accreditation," or "Initial Accreditation with Warning" were excluded from the sampling frame; there were 10 programs that fit this category.

Program type and size data were taken from the American Medical Association (AMA) FREIDA Online Database. Program type was classified as follows: (1) university-based, (2) community-based, (3) community-based university affiliated hospital, and (4) military-based programs. To facilitate data compilation and analysis in this study, programs designed as "university-based" were categorized as the "university" programs (majority of experience in a hospital that serves a medical school), and all other