Transition from Training to Surgical Practice

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KEYWORDS

• Surgical education • Transition to practice programs • General surgery careers
• Onboarding programs • Mentoring

KEY POINTS

- A subset of current surgery residency graduates does not feel confident or optimally prepared to enter directly into general surgery practice. Solutions to this vexing problem include redesign of the residency curriculum, credentialing during residency to encourage graded responsibility, effective onboarding programs for new surgeons, and development of transition to practice (TTP) programs in general surgery.
- Onboarding programs for new surgeons in larger health systems should include formal mentoring, career counseling, and operative case proctoring by senior surgeons as well as objective review of surgical outcomes.
- Onboarding programs for new surgeons in isolated practices may rely on former teaching faculty members, unaffiliated regional surgeons, or distance learning techniques to provide mentoring, proctoring, and case reviews.
- TTP programs have been developed in general surgery to provide a 1-year postresidency experience with independent decision making, operative procedure autonomy, personal mentoring by senior surgeons, practice management skill acquisition, and periodic review of performance and surgical case outcomes.

INTRODUCTION

The transformation of a surgeon from chief surgical resident or subspecialty fellow to attending does not take place in a single day nor does it occur without considerable effort on the part of the new surgeon or interested colleagues. For this transformation to successfully occur while ensuring patient safety requires far more of a planned program of TTP than a simple sink or swim model. The recent trainee is quickly thrown into the care of numerous patients for whom the clinical decisions more often involve

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shades of gray rather than the black or white learned in residency. Nights on call bring patients with emergent surgical needs that require crisp decision making, leadership, and judgment, which rely on experience they may not yet possess. A new graduate may be asked to perform complex or unfamiliar operative cases for the first time without a teaching faculty member across the table. In addition to these clinical challenges, the new graduate must quickly master the many facets of the business side of surgery, including billing and coding, insurance contracts and authorization, purchasing of expensive medical equipment, and management of health care personnel. All of this often takes place in a completely unfamiliar institution with many colleagues who are both strangers and competitors and a novel electronic medical record. Variation in the preparation provided by different training programs as well as individual surgeon skill sets make this transition from trainee to staff surgeon unpredictable. For patients to be well served, a new surgeon to get off on the right foot and to be successful, and the surgical department that they join to be stable, this critical period in a young surgeon's career must be well orchestrated.

This article focuses on surgical residency graduates' preparedness for practice, important issues that currently revolve around the transition from training to practice, institutional methods of onboarding for new surgeons, the American College of Surgeons (ACS) TTP program, and future methods that might be used to assist in this transformational period.

ARE CURRENT RESIDENCY GRADUATES READY FOR SURGICAL PRACTICE?

Several recent trends concerning surgical education have resulted in significant challenges in the preparedness of current graduates.[1] Residency has de facto been shortened by nearly 12 months due to duty-hour restrictions. Although the total number of operative cases has remained stable, the number of emergency cases has diminished. Opportunities for autonomy and independent decision making during residency have become a rarity due to regulatory changes, medical-legal concerns, societal and ethical changes, and health care financing enforcement. The majority of surgical experience in most programs occurs on subspecialty surgical rotations and exposure to general surgeons is limited. Approximately 80% of graduates choose to pursue fellowship immediately after residency, leaving only 20% who enter surgical practice. Surgical workforce studies document a shortage of general surgeons, which is predicted to worsen, particularly in rural areas.

It is apparent that current surgery residency graduates report less confidence about their preparedness to enter surgical practice and their ability to independently perform many common procedures.[2] Some of this expressed lack of confidence may simply reflect a younger generation of surgeons who are more comfortable voicing their concerns. Fellowship program directors recently reported, however, that 30% of new fellows could not independently perform a laparoscopic cholecystectomy and 66% were not able to operate without direct supervision for 30 minutes of a major procedure.[3] Napolitano and associates[4] documented disparate findings concerning residency graduates' readiness for practice when comparing the opinions of young ($\leq$45 years old) ACS fellows versus older (>45 years old) ACS fellows. Whereas 94% of younger surgeons thought that they had adequate surgical training and 91% felt prepared for surgical attending roles, only 59% of older surgeons believed that current surgical training was adequate and only 53% stated that graduates were prepared for the transition to surgical attending. Younger surgeons had concerns about business and practice skills during residency whereas older surgeons were troubled by paucity of training in communication, professionalism, and ethics during residency. In a survey