



# Is the **surgical generalist** falling out of favor?

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It should come as no surprise to the majority of surgeons that the number of surgical residents pursuing advanced training beyond their general residency requirements is continuing to escalate. Attrition across the country among practicing surgical generalists is increasing not only as a result of fewer medical students applying for surgical residencies, but also as more graduating surgical residents seek fellowship training. An article published in the 2005 *Journal of the American College of Surgeons* reported that more than 70 percent of recent surgical residency graduates have pursued fellowship specialty training (n=1,044), representing an increase from 55 percent in 1992.\* This trend has been observed across all surgical fields, not just general surgery. The reality of this issue is that what was once thought to be limited to general surgery is now affecting other surgical specialties, including orthopaedics, otolaryngology, ophthalmology, neurosurgery, and urology.

## **General training as a stepping-stone**

Surgical generalists are trained to be proficient in the majority of procedures within their specialty's scope of care without any further specific designation or specialization. Is surgical training as a generalist, irrespective of the field, becoming a mere stepping-stone to advanced surgical specialization? Each year, additional fellowships are being

\*Stitzenberg K, Sheldon G. Progressive specialization within general surgery: Adding to the complexity of workforce planning. *J Am Coll Surg.* 2005;201(6):925-932.

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offered across the country and are increasing not only in number but also in defined categories and subsets of categories. In 2007, the Fellowship Council—the accrediting body for minimally invasive, endoscopy, hepatobiliary, and bariatric fellowships—increased the total number of fellowship programs by nearly 15 percent.<sup>†</sup> The Fellowship Council currently offers more than 120 fellowships. This array of fellowship options exemplifies the growing trend toward further superspecialization.

## Who is driving?

### *Surgical generalist careers*

The driving force behind the observed trends in decreasing interest in a surgical generalist career is multifactorial. As the public becomes more Internet-savvy with an increasing number of medical education resources, the desire of the contemporary patient population to participate in medical decision making is driving the trend. Requests for care by “the specialist” are common in health care institutions across the country. These appeals are made in an earnest belief that the specialist will provide the best care. What if the surgical problem is outside of the specialist’s scope? If multiple specialists are required for a procedure, how many are too many to be involved? Which physician determines how or if to proceed? One way to circumvent such quandaries is the development of Centers of Excellence, which are composed of multidisciplinary teams of physicians. For example, at Cedars-Sinai Medical Center in Los Angeles, CA, the Spine Center provides multidisciplinary surgical and nonsurgical treatment for a variety of spinal disorders. Both open and minimally invasive techniques are offered to patients. The surgery is delivered by a spine specialist, who may have an orthopaedic, neurosurgery, thoracic surgery, or general surgery background. This provides seamless care to the patient who simply requests a specialist to resolve his or her spine disorder.

Yet, a significant number of patients patronize their local community hospital where they receive care from their local generalists. There,

they are likely to encounter a generalist surgeon who has reached master surgeon status in addition to a few specialists. Most specialists are clustered in large urban centers, remote from these communities. Such communities are not limited to rural areas but also include suburbs and small cities. Yet, there is no evidence that these patients are suffering from substandard care.

### *Specialties*

These demands are not unique to surgical patients and influence other medical fields as well. A driver affecting surgical and medical specialties is the overall acceptance of minimally invasive procedures. In addition to surgery, this trend has affected cardiology, radiology, and gastroenterology, such that each specialty has a pathway for a physician to become an interventionalist. There are procedures that multiple specialists within various fields are trained to perform, however, which has led to turf battles and imperialism over some surgical procedures by interventionalists. Surgeons have countered by developing training programs in endoscopy, natural orifice transluminal endoscopic surgery, and endovascular surgery. Fortunately, there are several examples of specialists from various fields collaborating in the multidisciplinary training of fellows to become interventionalists who share these procedures and patient care responsibilities in a collegial and mutually beneficial manner.

### *Residents*

If the public continues to desire care received from specialists, then more trainees may choose to pursue paths leading into specialist fields based on future prospects for operative cases. Predicting the needs of the population in the future is a key component driving residents toward their career aspirations. For example, as the number of open-heart procedures being performed in the mid- to late-1990s began to decline, more cardiothoracic surgeons were left without work, and the number of applicants for cardiothoracic fellowships declined in parallel to this trend.

Another driver is a desire to enhance basic training received in residency. The argument

<sup>†</sup>*The Fellowship Council Newsletter*. Winter 2008. Available at: [http://www.fellowshipcouncil.org/documents/Winter2008Final\\_001.pdf](http://www.fellowshipcouncil.org/documents/Winter2008Final_001.pdf). Accessed February 12, 2009.

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for fellowship training after generalist surgical training is that the changing paradigm of surgical education, such as work-hour restrictions, has led to deficits in technical skills, which result in insecurity regarding technical skills upon completion of baseline training. Thus, fellowship training affords more individualized apprenticeship that continues the development of technical skills. Many generalist programs produce graduates who are confident in their technical skills and prepared practitioners. If these individuals have advanced degrees, marked research productivity, or distinguished administrative talents, they may be as competitive as their fellowship-trained counterparts. Is the goal of fellowship training to allow surgeons an opportunity to hone particular techniques used to provide a superior level of surgical care, or does fellowship training provide a surgical finishing school that builds confidence and exposes the participant to advanced techniques? The accompanying lifestyle options that specialization often offers are an equally attractive option for trainees. This issue has been widely debated and there appears to be no change of these trends in sight.

### **Who cares for the patient?**

There are issues, however, that remain to be worked out. While there is public demand for increased specialization and more generalist trainees envision greener pastures after fellowship, is this shift safe for the patient? Historically, the primary care physician consulted the generalist and the generalist has been the central care provider for the surgical patient. Who is to direct the care of the patient when surgical specialists and superspecialists become all too common? Are the primary care physicians to direct the surgical specialists in the management of a complex patient? Few surgeon generalists would likely agree to relinquish the primary oversight of their patient, whereas specialists may be more motivated to do so. However, as their clinical scope becomes further narrowed, will specialists be prepared to oversee all care of their patients?

As every patient issue has the potential to become micromanaged, the specialist may lose sight of the overall picture in caring for the patient. As more fellows are being trained, then a pseudo-

derivation of the Monroe doctrine would argue that the number of generalists being trained must be decreasing. Hospitals in rural communities and outlying communities surrounding large cities, small cities, and indigent areas rely heavily on surgical generalist providers. Even if specialists practice in these settings, the generalist may be forced to provide at least temporizing care until the specialist arrives. From a geographical perspective, this country is reliant on these providers and would be confronted with an unyielding dilemma if every broken arm could only be treated by a fellowship-trained, long-bone specialist orthopaedic surgeon.

### **Changing curriculums**

If the consensus agrees to support continued specialization and increased attrition away from generalist surgical training, then what is the role of the current five-year training model? The idea of a skills-based curriculum in surgical training versus the “everyone does five years” approach has become more than suggestion in recent years. Current investigations into this novel concept are under way within residency regulatory bodies. The argument has been made to truncate residency to allow for individuals to seek their surgical niche. Northwestern University in Chicago, IL, has developed a pilot program within its general urology residency to allow residents to pursue mini-fellowships during their fifth year. This new approach equates to allowing the chief residents to focus their surgical case exposure to a specific field. If, for example, one chooses a focus on infertility urologic procedures, he or she may be excused from the oncologic requirements set forth in the traditional general urology training program. Although this system causes an obvious lack of uniformity among graduates and deficiencies in certain procedural areas, it is rationalized that the graduates will not include the less focused scope of care into their practice.

### **Influence of health care**

The state of health care reform plays an enormous role in the state of favor toward surgical generalists. Remuneration has continually decreased over the last decade, and the end does

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not appear to be in sight. Reflective changes in the surgical world have forced some surgeons to adapt to these reimbursement changes in the care they provide. By partially focusing on particular procedures and operations for which they can bill and be reimbursed, some generalist surgeons have begun limiting their scope of practice in an effort to remain in an economically viable business. In essence, some surgical generalists have become pseudospecialists as they try to stay afloat financially.


Rather than being “good” at a wide variety of things, surgeons must be “great” if they intend to be paid for their services. Thus, most would agree it is easier to master a few skills rather than a lot, or, in other words, narrow scope of care and specialize within a field. As mentioned previously, the surgical specialist opportunity has historically offered surgeons a more lucrative lifestyle, which is yet another motivating factor for fellowship training. Competence across a wide variety of surgical tasks is not as challenging for the master surgeon. The value of these individuals becomes increasingly salient with their increasing scarcity.

It is within reason to imagine third-party payors reimbursing surgeons partly based on their level of training. Likely this would be established as a benchmark tool of quality of care delivered. Hence reimbursement rates might differ if a colon resection is performed by a colorectal trained surgeon versus a general surgeon.

## The role of the College

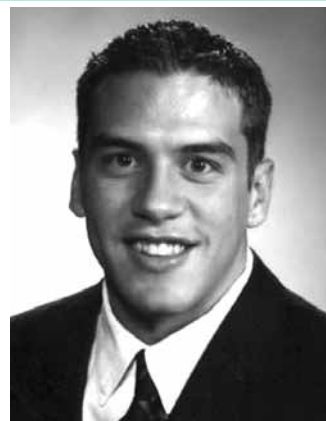
It remains crucial that this debate exists at the forefront of topics being considered by the American College of Surgeons. The role of the ACS is to ultimately ensure that patient safety is never compromised. It is also the charge of our surgical societies to provide oversight and assistance in addressing each of the components of this issue. It may be argued that indeed the surgical generalist is falling out of favor, and this change in health care may prove to be rather significant for the population. Our responsibility as surgeons in this climate is to be cognizant of the morphing paradigm around us and evaluate our role and potential future as changes occur.

To this end, the Resident and Associate Society of the ACS will be providing a venue to further explore

the role and relevance of the surgical generalist at the ACS Clinical Congress in October in Chicago, IL. The RAS Symposium—scheduled for Sunday, October 11—will address the question of obsolescence as it relates to the surgical generalist using a debate format. The audience will have an opportunity to participate in the debate during a frank and open question-and-answer period. This session is a rare opportunity for surgeons and other attendees to weigh in on this important issue. Make plans now to join RAS at this year’s Clinical Congress. 

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