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Pandemic and the Role of the Program Director as Gatekeeper

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Gatekeeper

Noun

Pronunciation: /'gāt,kēpər// 'gert,kipər/

1: An attendant at a gate who is employed to control who goes through it.

1.1 A person or thing that controls access to something.¹

The program director of an ACGME-accredited surgical residency or fellowship program has many roles. The ACGME Common Program Requirements (CPRs)^{2,3} list the many explicit duties of the program director in program requirement CPR- II.A.4. As noted in CPR- II.A.1., though, the program director is responsible for the overall program, and therefore, implementation of every program requirement. Written duties of the program director other than those in the Program Requirements include fulfilling contractual obligations of employment in a department, a medical school, a hospital, and/or a corporation. The program director must also abide by the bylaws, covenants, and other documents governing each clinical setting in which s/he practices. In addition to those many written requirements, the program director is generally expected to fulfill a wide range of unwritten requirements, including demonstrating compassion for, and maintaining the morale of, the residents/fellows, the faculty members, the coordinator, and other staff, while also maintaining discipline in the program. The program director is often a confidant of the residents/fellows, their spouses and significant others, the other faculty members and staff and, at times, the chairman. The program director must negotiate and act as a consensus builder among

the residents/fellows and all associated with the program (including hospital leadership), but must also act as an enforcer for contracts and other existing obligations. The program director is expected to be a teacher and, beyond teaching, an educator. In addition to these and other unwritten jobs, the program director must maintain her/his own well-being, including relationships with family and friends.

Two of the most important roles of the program director, though, are those as gatekeeper. The role of keeping the front (or “in”) gate is now codified in CPR-II.A.4.: “The program director must have responsibility, authority, and accountability for...resident/fellow recruitment and selection...” In performing that role, the program director attempts to identify not only qualified candidates but those who are most capable of completing the curriculum in the expected time and fashion and, importantly, who are also a “cultural fit” for the program. Recruitment and selection of the residents/fellows are clearly central to the success of the program and are very important roles of the program director. Of much greater significance, though, is the role that the program director plays as keeper of the back (or “out”) gate of resident/fellow graduation.

The role of the program director as keeper of the back “out” gate has been explicitly codified in program requirements for almost 3 decades. The 1992-1993 General Requirements of the Essentials of Accredited Residencies in Graduate Medical Education (Requirement IV.A.2.f.) stated, “Responsibilities of the program director include: The provision of a written final evaluation for each resident who completes the program. The evaluation ... should verify that the resident has demonstrated sufficient professional ability to practice competently and independently.”⁴ The Common Program Requirements that became effective July 1, 2019 state in CPRs V.A.2.a) and V.A.2.a).(2).(b), “The program director must provide a final evaluation for each resident upon completion of the program. The final evaluation must verify that the resident has demonstrated the knowledge, skills, and behaviors necessary to enter autonomous practice.”^{2,3} Although the verbiage of the requirements has been slightly altered over the years, the essence of the requirements is unchanged. The program director “owns” the responsibility of determining a

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resident's/fellow's readiness for completion of the program.

Determining resident/fellow readiness for program completion ("graduation")

Although there is precious little evidence to support or refute the hypothesis, many consider competency-based education to be the "holy grail" by which readiness for program completion should be determined. There are numerous regulatory, curricular, and local obstacles to actual implementation of competency-based education.⁵ Some programs, subspecialties, and specialties have made small, but very resource-intensive, steps toward competency-based education, but remain far from reaching that goal. Lacking a fully developed system of competency-based education, program directors rely upon a diverse set of tools to help them identify those residents/fellows who are ready for program completion. The available tools vary between specialties/subspecialties and, among those tools available, a given program director may rely more heavily on some than on others. Examples of items that are commonly found in the program directors' "toolbox" for determination of the readiness of a resident/fellow for program completion (graduation) are listed in [Table 1](#).

Implications of the graduation decision

The decision to graduate a resident/fellow says to the certifying board, credentialing bodies, perhaps a future program director, and, most importantly, the public, that the individual is able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice (CPR-IV.B.1.b).(2) and that the individual has demonstrated the knowledge, skills, and behaviors necessary to enter autonomous practice (CPR - V.A.2.a).(2).(b)). The implications for the program are substantial. That individual will always "wear a badge" that says, "I graduated from ABC program," and the image of program ABC in the eyes of the profession will be affected—positively or negatively—by the performance of that individual. The program also has an important obligation to the individual. Imagine giving a pilot's license to an individual who was truly not prepared to fly an airplane. It would be unfair to that individual, who could be killed or injured without even knowing that he or she was not ready to fly an airplane. By graduating a resident or fellow who is not ready for independent practice, the program director puts the professional well-being of that surgeon at risk by inviting failure in the certification examination sequence, credentialing actions, medical-legal actions, and the self-realization of unintentional harm to patients. Most importantly, giving a license to

an ill-prepared pilot would be tremendously unfair to anyone who chose to go up in a plane with that pilot, or who happened to be unlucky enough to be at the exact spot where that pilot's plane makes a sudden unplanned (otherwise known as "crash") landing. In surgery, the graduation of a resident/fellow who is not truly ready for independent practice puts the patients who will be treated by that individual at risk. It is a tremendous abrogation of the program director's responsibility to the public and should be a "never event."

The decision not to graduate a resident/fellow on schedule also has implications. For the public, there is a slight delay in 1 surgeon entering the workforce. For the institution sponsoring the program, there are financial implications. Having exceeded the number of years typically associated with first certification in the specialty, the full payment of Centers for Medicare and Medicaid Services and other graduate medical education funding will not be available for that individual and must be come from another source. That source is typically clinical income. Another very real consideration for the program is the ripple effect on other residents/fellows in the program. If a resident's/fellow's graduation is delayed due to insufficient technical ability, that resident/fellow would presumably devote most of the remedial period performing operations. For most programs, operations are not an unlimited resource. The operations done by that resident/fellow in the remedial period would not be available to be performed by other enrollees who would otherwise be progressing through the program at the expected pace. For the remediated resident/fellow, delayed graduation may result in the postponement of further professional education (ie fellowship) and/or entering practice. As a result, the receipt of anticipated income would be deferred, which may, then, result in deferred repayment of educational and/or personal loans and other debt obligations. With delayed graduation, there may well also be a degree of personal stigma among colleagues, friends, and even family members.

Any real or potential cost to the institution, the program, and the individual of delaying the graduation of a resident/fellow, though, are trivial in comparison with the cost to society of the graduation of an individual who is not yet ready to practice surgery safely and independently. That fact should always guide a program director's decision regarding the graduation of each resident/fellow and, in making that decision, the program director should judiciously weigh all available evidence regarding the suitability of the candidate to safely practice surgery without supervision. No resident/fellow should be allowed to graduate from a program simply because the calendar day has come on which she/he was anticipated to graduate when matriculating into the program.

Table 1. Typical Items in the Program Director's "Toolbox" for Use in Decisions of Resident/Fellow Graduation

Toolbox item
Completion of a number of months of clinical surgical assignments, as mandated by program requirements or by certifying board requirements
Completion of each rotation/clinical experience mandated by program requirements or by certifying board requirements
Resident/fellow evaluations
Direct clinical observations
Cumulative multisource evaluations, including those from faculty members, patients, co-residents/fellows, staff, others
Simulation activities
Clinical Competency Committee determinations
Milestones achievement
Case logs
Operative procedures
Nonoperative patient evaluations
Nonoperative patient treatments
Case minima
In-training examination scores
Scholarly activity of the resident/fellow
Entrustable professional activities
Completion of requirements for board certification that are not included in ACGME program requirements. Examples of such for general surgery include Advanced Trauma Life Support, Advanced Cardiovascular Life Support, Fundamentals of Laparoscopic Surgery, and Fundamentals of Endoscopic Surgery. Other specialties have analogous but different requirements.

Spring 2020

This article was written in April 2020. The previously projected date of graduation more than 4,900 residents in the 7 core surgical specialties (the 7 specialties that have not historically required earlier completion of general surgery residency include neurological surgery, obstetrics and gynecology, ophthalmology, orthopaedic surgery, otolaryngology, urology and, of course, general surgery) and almost 2,000 residents and fellows in 32 surgical subspecialties is less than 4 months away. However, we now find ourselves in the midst of a pandemic unlike any seen for more than a century and, at this writing, the peak incidence of COVID-19 cases has not yet been reached. Mitigation efforts, including social distancing, are currently in force in most parts of the nation. A mitigation effort specific to surgery is the cancellation of elective operations. Cancellation of elective operations and other invasive procedures was called for by the American College of Surgeons on March 13,⁶ then by the Centers for Medicare and Medicaid Services⁷ and the American Hospital Association⁸ 5 days later.

With very few exceptions (eg the subspecialty of orthopaedic trauma), the surgical specialty and subspecialty programs accredited by the ACGME rely heavily upon elective procedures as educational resources for enrolled residents and fellows. It is unclear at this time when elective procedures may be resumed. Their return will predictably vary by location and institution. Even within a given institution, there will predictably be a period of ramping up to the pre-pandemic volume of elective procedures. The social distancing aspect of the mitigation effort has also resulted in elimination of all but essential physical clinic and office visits, thereby disrupting the ability of residents and fellows to evaluate patients with surgical diseases and other problems. With reduced procedural and outpatient volumes, some surgical residents/fellows in institutions with large volumes of COVID-19 patients have been reassigned to nonsurgical duties. This is particularly true for those residents/fellows who have had any significant education and experience in critical care. Some residents/fellows are functioning under a "platooning" schedule whereby they are on duty in the hospital for a certain number of days then off duty for a like number of days. Such schedules are possible because of greatly decreased surgical demand and are simultaneously advantageous by virtue of decreasing exposure of residents/fellows to infection with the virus. Other surgical residents/fellows are essentially idle at this time, other than remotely attending available educational conferences and self-study pursuits. The pandemic has resulted in postponement or cancellation of the nationally administered in-training examinations of some specialties/subspecialties and of examinations in such educational programs as the Fundamentals of Laparoscopic Surgery, the Fundamentals of Endoscopic Surgery, and others required by the certifying boards.

The pandemic has had, and will have, significant impact on the ability of program directors to assess the readiness of residents/fellows for graduation in 2020. It is likely that many programs will find it difficult or impossible to hold spring meetings of their Clinical Competency Committees. Those that do meet will have to reckon with a fewer than usual number of performance evaluations of residents/fellows in the final stages of their education. They will also have to contend with case logs that contain fewer cases, overall, and certainly fewer complex operations that would normally be accomplished by a resident/fellow approaching graduation. Indeed, many will have to contend with the fact that the residents/fellows spent their last scheduled months in the program providing little or no surgical care.

Regardless of how long it lasts, the impact of the disruption of elective procedures and other clinical

learning opportunities by the pandemic upon a resident's/fellow's education will be inversely correlated with the length of the residency/fellowship program in which one is enrolled. The durations of the core surgical specialty programs and integrated residency programs range from 4 to 7 years. The duration of the fellowship programs, though, is only 1 to 3 years. A truly unfortunate fact is that more than 1,050 of the individuals who would have been anticipated to graduate in June-July 2020 are enrolled in 1-year fellowship programs. Should the pandemic significantly affect their hospitals and other clinical sites for 3 months, those individuals will miss performing elective procedures for one-quarter of the scheduled duration of their fellowship programs. In missing what should have been the final 25% of their time to perform elective procedures, it is highly likely that they will miss more than 25% of the elective procedures that they would have performed, since they would predictably be doing more—and more complex—cases in the last half of their year than in the first half.

Decision time

Can the program still graduate a resident/fellow “on schedule” despite that individual having failed to achieve all the case minimums established by the Review Committee, and/or having served less total time in clinical surgical assignments than specified in the Program Requirements, and/or not having an opportunity to acquire clinical experience in a particular subspecialty area as detailed in the Program Requirements? From the standpoint of the ACGME and the Review Committee, the answer is yes. The ACGME and the Review Committees establish and monitor compliance with requirements for program accreditation.

They have no standing in a program's decision of whether to promote or even graduate individual residents/fellows. Whether the program should graduate a resident/fellow who has substantial experiential deficiency of any type is a very different question. A resident/fellow should be allowed to graduate only if the program director can personally verify that “the resident/fellow is able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice” and that the individual “has demonstrated the knowledge, skills, and behaviors necessary to enter autonomous practice.”

These are weighty and often difficult decisions to make. They should invoke soul searching on the part of program directors, even under normal circumstances. The limitations imposed upon the education and evaluation of many residents/fellows by the pandemic are far from normal and even further from optimal. The diploma of graduation from a residency/fellowship program and the final evaluation written by the program director cannot

be marked by asterisks or otherwise be conditional. They cannot say, “This resident/fellow demonstrated the ability to practice independently in the specialty of ABC Surgery except for the following procedures:” and they cannot say, “This resident/fellow probably would have been able to demonstrate the knowledge, skills, and behaviors necessary to enter autonomous practice had it not been for the pandemic.” Furthermore, the program should not pass a graduate on to another program, a partner or an employer with the understanding that the graduate will be mentored or proctored in specified areas of deficiency. Once the graduate leaves the program, the program has no way of ensuring that such mentoring or proctoring will be provided. Indeed, the program has no assurance that the graduate will actually enter the program, partnership, or employment that was planned. The diploma from an ACGME-accredited program must be an unequivocal declaration by the program director that the graduate has demonstrated the ability to safely practice the specialty autonomously.

Looking beyond the fog of war

This pandemic has brought into sharp focus the desirability of carefully evaluating almost every aspect of graduate medical education at the local and national level. Are audition rotations indispensable for the evaluation of candidates for the program? Can the best candidates for the program be identified using virtual interviews? Are conferences held remotely as effective as educational tools as those held in person? Is each of the curricular areas specified in the Program Requirements of a given specialty crucial to the practice of that specialty? Or, are some of them there because they are historic vestiges, merely desirable or just because they can be? Are the numbers right for each of the case minima? Are each of the case minima necessary for a program to be able to appropriately educate residents/fellows, or might the transferability of skills between different operations be recognized by more broadly grouping case categories? Are each of the requirements for entry into the board certification process necessary and correctly set? The experience of the last 2 months has fostered support for accelerating the transition to a true competency-based system of graduate medical education. Unfortunately, declaring that an educational system is competency-based does not make it so, and many substantial obstacles must be overcome in the transition to such a system. The momentum for that transition is greater now than ever before, but those obstacles cannot be overcome in the next 3 months and will not be overcome in the next academic year.

Summary

The COVID-19 pandemic has resulted in many unforeseen perturbations in the education of surgeons in the short-term and has activated consideration of many long-term systematic improvements in surgical education. One principle remains, regardless of those perturbations and whatever systematic changes the future may hold. The program director must determine when a resident/fellow is prepared to practice safely and autonomously in the specialty. As the gatekeeper, the program director must use all available tools to make an honest decision in the best interest of the program, the resident/fellow and, most importantly, the public.

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