

ETHICS CASE

How Should Colleagues Respond to Diminishing Capacities of an Aging Surgeon?

Commentary by Peter Angelos, MD, PhD

Abstract

When an esteemed elderly colleague needs assistance completing procedures safely, fellow health professionals have the responsibility to respond in order to mitigate risk to patients. There is a strong ethical basis for bringing the surgeon's declining capacity to his or her attention as well as to the attention of others. Ongoing capacity assessments could be one method for tracking diminished capacities among surgeons so that they can stop practicing surgery before putting patients at risk.

Case

Dr. Roberts is a revered 70-year-old general surgeon at a major university-affiliated hospital, where he has been practicing surgery for almost four decades. He has mentored many generations of surgeons, including his junior colleague Dr. Patel, a 39-year-old surgeon who completed his residency four years ago. Because Dr. Roberts trained and advised him throughout medical school and residency, Dr. Patel holds his long-term mentor in high esteem.

In the last few months, Dr. Patel has realized that more of Dr. Roberts's patients have been experiencing postsurgical complications than in the past and that his laparoscopic surgeries have resulted in patients bleeding more than usual, which has in turn led to those patients' need for transfusions. Furthermore, Dr. Roberts has been losing dexterity and endurance during long procedures and has relied increasingly on Dr. Patel and other junior colleagues to step in to finish operations. Recently, Dr. Roberts even started falling asleep near the end of a long procedure, and Dr. Patel and a resident had to quickly step in to keep the patient safe. Numerous colleagues of Dr. Roberts have also noticed decline in his performance, but they are reluctant to discuss their concerns due to their regard for their long-term mentor.

While Dr. Patel feels that he is obligated to address his and his colleagues' concerns, he is not sure whom to approach or what to do.

Commentary

An aging academic surgeon who has been a pillar of his department is getting older and his abilities are diminishing. His colleagues have had to step in to ensure his patients'

safety. In my experience, the scenario described is unfortunately all too familiar in American surgery. Evidence suggests that [surgical performance declines with age](#). For example, older surgeons' patients have higher mortality rates than younger surgeons' patients for carotid endarterectomy [1, 2], pancreatectomy, and coronary artery bypass grafts [2], although the effect is small and contributed by older surgeons with low procedure volumes [2]. Moreover, there are a large number of aging surgeons: approximately one-third of all practicing surgeons are over age 55 [3].

It is sad to see a master surgeon like Dr. Roberts decline in skill and endurance, but it is an inevitable consequence for all aging professionals. Indeed, one study found that though surgeons performed better than the general population on tests of psychomotor function, they exhibited expected age-related declines [4]. And there is some evidence that declines in psychomotor function are greatest for those aged 70 and older, like Dr. Roberts, as another study found that only 38 percent of practicing surgeons 70 and older performed within the range of younger surgeons on psychomotor tasks compared with 78 percent of those aged 60 to 64 [5]. If Dr. Roberts cannot do surgery safely, he should not be operating, but he might still have much to offer in teaching and mentorship. For example, as acknowledged in the American College of Surgeons's "Statement on the Aging Surgeon," "Surgeons relinquishing clinical roles can contribute significantly to teaching, surgical assisting, research, or administration. If their abilities permit, and if they are willing, they should be given opportunities to contribute to these areas" [3].

Nearly every surgeon can identify specific teachers who have played major roles in their education and surgical practice development. Positive mentors and [role models](#), while important in all aspects of medical education, are perhaps more important in surgery than in any other field in influencing career choice [6, 7]. Moreover, surgical education relies heavily on the apprenticeship model, in which trainees observe a limited number of faculty performing a great many surgeries [8]. In my experience, if I ask almost any surgeon why he or she performs an operation in a particular fashion, almost inevitably some part of the answer will include that "I trained this way" or that "Dr. so-and-so did it this way." Often how surgeons do things in the operating room is not grounded on any particular evidence-based benefit. This is not to suggest that there is no evidence to support operative techniques, but rather that the small individual differences in technique might not be evidence-based. Instead, surgeons rely on their own experience with a technique and the outcomes that they have seen follow from using a technique repeatedly over time. Indeed, evidence suggests that practicing surgeons tend to rely more on their own judgment and journal summaries of the latest research than on clinical practice guidelines [9], although efforts are being made to incorporate [evidence-based medicine](#) into surgical education [10].

Because of the nature and scope of the influence of the apprenticeship model, it can be difficult for surgeons to be critical of their teachers, mentors, and role models, even

when patients are sometimes put at risk, as this case illustrates. Nevertheless, as professionals, surgeons must exercise the same level of [self-regulation](#) that all physicians in other specialties in medicine are expected to uphold. By agreeing to care for patients, all health care professionals are obliged to try to maximize benefits to them and minimize their risks of being harmed. From this ethics perspective, if a surgeon sees another surgeon putting patients unnecessarily at risk due to his or her diminished physical capacities, he or she has clear ethical responsibilities. The surgeon (whether attending, fellow, or resident) must immediately act to protect the patient [11], in this case, by attempting to bring the operation to a safe conclusion. However, the scope of responsibility does not end there. The surgeon who intervenes (in this case, Dr. Patel) also must communicate with the impaired surgeon about what has happened and why it was necessary to step in. Allegiance to an esteemed colleague should never stand in the way of patient safety. Finally, physicians have an obligation “to report a physician who seems to be impaired to an appropriate authority” [12], so Dr. Patel has an obligation to report Dr. Roberts to the chief of staff or chair of surgery.

When and How Should Colleagues Intervene, and Which Ethical Values Can Help Colleagues Deliberate?

There is no doubt that telling a highly regarded senior colleague that he or she is putting patients in jeopardy is a challenging task. However, we should assume that any ethical surgeon would want to know if he or she was putting patients at increased risk due to diminished skills—physical and cognitive—or endurance. Since physicians have been shown to have a limited ability for accurate self-assessment [13], aging surgeons might not realize that their capacities have declined to the point where patients are being put at risk—as appears to be the case with Dr. Roberts, who “started falling asleep near the end of a long procedure.” Yet there is evidence of a relationship between surgeons’ self-perceived cognitive decline and retirement status [4], which suggests that those who are aware that they are no longer able to meet the level of safe, high-quality care that patients need take steps to ensure that patients are not put at risk. If surgeons can be supplied with objective evidence of their declining capacities—such as higher complication rates or worse outcomes—they might be more willing to respond positively. For example, Dr. Roberts could limit his practice to shorter, less technically demanding surgical procedures and refer patients for more challenging procedures to his associates in the department.

What should be done when a surgeon is not willing to step back from the operating room, even after being presented with evidence that patients are being put at risk? In these circumstances, his or her colleagues—and particularly if the risk is not imminent, the chair of surgery or chief of the section—have a professional responsibility to intervene. This responsibility is part of the implicit [social contract](#); it is required of surgeons in return for the profession’s autonomy and ability to self-regulate [14]. Much as the American Board of Surgery or any other surgical specialty board certifies that a

surgeon has the requisite skill and judgment to practice surgery, each surgical department chair has a similar duty to ensure that surgeons who practice in his or her group are able to care for patients in a safe fashion and to act if notified of incompetence [15].

How should a surgical department chair intervene with an aging surgeon whose capacities have declined? Perhaps the most important aspect of the interaction would be to emphasize that declining skill, dexterity, and endurance—while they could be putting patients at risk—are not evidence that a surgeon can no longer contribute to a department or group in other capacities. Dr. Roberts clearly should not be doing all of the operations he has been doing, but he likely has much that he still can offer a department of surgery. The accumulated experience of a senior surgeon can be invaluable in helping to educate and mentor younger surgeons and students, long after the surgeon has given up operating [3]. Some surgeons may measure their self-worth in terms of their ability to operate. Yet the cognitive aspects of surgical practice—including planning, decision-making, and error-detection—are difficult to teach. Such training promotes surgeons' efficient learning and accurate execution of skills [16]. This is one area where an experienced senior surgeon may be able to make significant contributions even after he or she stops operating.

As an academic surgeon (and one who is clearly aging), I can anticipate the rebuttal to some of the statements above. For example, someone might ask, "What about the master surgeon who started at a level of skill and experience far above his or her peers? Even with a decline in capacity, he or she may still be able to practice surgery at very high levels." Certainly this is true of some surgeons. And, in some cases, a declining experienced surgeon could be safer than, say, a young inexperienced surgeon. However, the level of surgical care can never fall below the minimal threshold for safety. Unfortunately, it can be difficult to know when an aging surgeon is approaching this minimum threshold. Open questions remain: When does "decline" become "impairment"? And when does "impairment" compromise safety?

Additionally, how should minimum thresholds be defined and established, and by whom? Might patients define this differently than surgeons? Perhaps a key ethical indicator is the value of *transparency*. That is, if you were a patient, would you want to know that this surgeon is, in the eyes of his colleagues, declining in capacity and ability? When the answer is "yes," this can change the ethical significance of surgeon's colleagues' responses to knowing about an unsafe or potentially unsafe situation. Because surgeons peak at different levels of skill and dexterity, age alone is not a good measure of decline. We all know that physical and mental capacities decline at different rates in different people as they age [17]. Ideally, however, intervention should happen long before a surgeon falls below the minimum threshold of safety to avoid putting patients at risk.

Monitoring Surgeons as They Age

Could surgeons' declining capacities be monitored to protect patients from harm without removing capable surgeons from clinical activities? One way to accomplish this goal is a formal evaluation of physical and cognitive skills, such as that offered by the Aging Surgeon Program [18]. Yet there is evidence that surgeons do not change their practice in response to objective assessments [4]. Another way to answer this important question would be to gather data on young surgeons' manual dexterity, physical endurance, and clinical judgment using objective instruments; follow each surgeon over time to document individualized trajectories of surgical capacity and endurance over time; and then make that evidence available to the surgeons whose data was collected. Although the question of when to intervene would still remain, if data for all surgeons had been gathered, for a given surgeon, objective evidence, *over time*, that a decline in surgery-related skills was taking place might be enough to prompt more introspection and self-awareness. If the evidence does not prompt an individual surgeon to take proactive steps when declining capabilities become evident, this data would also be a valuable source of objective evidence if surgical leaders in the department or section needed to intervene. Of course, reliable assessment tools would first need to be created and validated for this purpose.

It might seem naïve to believe that surgeons would voluntarily limit their practices if they knew that their capacities had significantly declined. However, much as we depend on the professionalism of surgeons to maintain their continuing education so that their patient care improves with our data, we also need to depend on surgeons to take seriously their ethical responsibility to ensure that they can safely care for every patient who seeks their care.

Although it may be difficult for Dr. Patel to discuss his concerns with his mentor, Dr. Roberts, the responsibility that all physicians have to protect patients requires him to do so. In addition, the prior relationship between Dr. Patel and Dr. Roberts should further enable Dr. Patel to intervene to preserve Dr. Roberts's reputation as an excellent surgeon. If Dr. Roberts is unwilling to voluntarily alter his practice to avoid putting patients at risk, Dr. Patel's duty to future patients requires him to notify departmental leadership to compel the limitation of Dr. Roberts's surgical practice. Undoubtedly, such a circumstance would be a tragic end to a surgical career, but one that is necessary to protect patients as well as the integrity of the surgical profession.

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