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Neighborly Help or Itinerant Surgery?

James S. Allan, MD, MBA¹, Alberto Ferreres, MD, PhD, FACS (Hon.)², Robert M. Sade, MD³

¹Department of Surgery, Massachusetts General Hospital, and Harvard University, Boston, MA

²Department of Surgery, University of Buenos Aires, Buenos Aires, Argentina, and University of Washington, Seattle, WA

³Department of Surgery and Institute of Human Values in Health Care, Medical University of South Carolina, Charleston, SC

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INTRODUCTION

Robert M. Sade, MD

The evolution of the health care market over the last couple of decades has produced many realignments of referral patterns, institutional alliances, and practice patterns. Among the changes resulting from inter-hospital affiliations has been an increase in the number of surgeons operating at hospitals distant from their home medical centers. A frequent arrangement is for the visiting surgeon to arrive at the distant hospital the day before surgery, meet the patients and review their histories and indications for operation, perform the operations the next day, remain overnight, make rounds on the postoperative patients the next morning, then return to their home hospitals, leaving the remainder of postoperative care in the hands of someone else.

Questions have been raised about the acceptability of these arrangements: is it ethical for a surgeon to leave her early postoperative patients in the hands of another physician, or is this a form of itinerant surgery that has been condemned by the American College of Surgeons (ACS) for many decades?

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Dr. Dorothy Glinda is a thoracic surgeon who has been in practice for 10 years. Because of her husband's desire to be close to his aging parents in Emerald, Kansas, the family moves and she finds a position with a well-known and well-established group of thoracic surgeons

Address for correspondence: Robert M. Sade, M.D., Medical University of South Carolina, 30 Courtenay Drive, Suite 277, MSC 295, Charleston, SC 29425-2270, sader@musc.edu.

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at Emerald Regional Hospital (ERH). She has been there for a few weeks when one of the older partners, Dr. Oscar Z. Diggs, asks her to cover for him the following week at Oztown General Hospital (OGH), which is 75 miles away. He was planning to do two lung resections for non-small cell cancer at OGH, but his wife is having an operation on the same day and he cannot leave town.

Dr. Diggs gives Dr. Glinda copies of the patients' medical records and laboratory studies, telling her that the standard process is for the thoracic surgeon to do the two cases assisted by another surgeon, stay overnight, round on the patients early the next morning, then return to ERH, leaving continuing care in the hands of the assistant. The assisting surgeon is Dr. Lyon, a well-trained, reliable general surgeon who has been helping in this way for several years; he does thoracic operations, but does not do lung resections. Dr. Glinda has a busy operating schedule the following week, but she could get away for that one day.

Dr. Glinda is not sure whether she ought to agree to do this. On the one hand, the process is well-established and the patients will have postoperative care by Dr. Lyon, a reliable general surgeon with thoracic surgery experience. On the other hand, perhaps the best postoperative care can be provided only by a thoracic surgeon. She asks two thoughtful surgeons what they think she should do.

PRO

James Allan, MD

Dr. Glinda should help out her colleague. In doing so, she will be providing first-rate operative care in a timely fashion to two patients with untreated lung cancer. Dr. Glinda's actions will be ethical and would actually represent an improvement over the current common practice in community thoracic surgical care, where the majority of operative thoracic care is still provided by non-thoracic surgeons^{1,2}. Moreover, these patients will benefit from being treated at a hospital that is familiar and close to home. Involving a general surgeon (who assisted at surgery and who regularly provides other care at this hospital) in the post-operative management of these thoracic surgical patients is perfectly acceptable.

The realities of surgical practice—The economic and practical limitations on medical practice today always create a trade-off between access to care and quality of care. It would be easy for me to posit that a patient should only receive care at a major, high-volume academic hospital, and that this care should only be provided by a board-certified thoracic surgeon. Taking this argument to its extreme, a patient would be best served by having the thoracic surgeon perform the operation, and then having that same surgeon provide all of the patient's postoperative care. In this ideal world, the surgeon would do one operation on Monday morning, and then remain at that patient's bedside with no other responsibilities until that patient was discharged home later that week. Then, he or she would take a few days off to rest, since we all know that tired physicians are more prone to make mistakes. Once rested, the surgeon would move on to the next patient. The only problem with the broad application of this preposterous approach would be that the vast majority of lung cancer patients would die, never having had access to a thoracic surgeon.

So what do we do to improve access to care, without harming the quality of care? We function in teams, and we delegate appropriately...and I emphasize *appropriately*. There is not a single surgeon reading this article who hasn't delegated a dressing change to a nurse or the management of a nighttime rapid atrial fibrillation to a resident. Many of us go so far as to delegate our histories and physical examinations, key factors in determining whether to operate, to advanced practice nurses or physician assistants. In the post-operative care arena, delegation is even more common, particularly at academic medical centers. In the scenario under discussion the pre-operative evaluation has been done by a thoracic surgeon, and the operation will be performed by a thoracic surgeon. It is the delegation of post-operative care that is at issue. The basic question at hand is "What if there is a post-operative emergency, and will this delegated care arrangement be safe and sufficient?"

To this end, I must point out that, at the academic center where I work, even in the direst circumstance of a cardiac arrest or massive bleed on the first post-operative night, the thoracic surgeon is not the one who is in-house responding. In fact, the responding physicians are most commonly second-year medical and surgical residents. There is no attending surgeon or staff-level medical physician of any sort on the code team. The thoracic surgeon is only required to be on-call from home, which should ideally be less than one hour away by car. In contrast, at one of the community hospitals where I work, this same dire situation would be immediately managed by an in-house staff-level intensivist, with a board-certified general surgeon 20 minutes away, and a staff thoracic surgeon 75 minutes away. Thus, if we assume that a major post-operative bleed is the most likely remediable event requiring a staff surgeon's immediate presence, my community hospital has my academic medical center beat by 40 minutes. In reality, an emergency requiring the immediate presence of a surgeon is a rare occurrence, and the skill set that is needed is only being able to re-open a fresh incision and tamponade bleeding. This is a skill that is obviously shared by both thoracic surgeons and general surgeons, especially ones who routinely assist at thoracic surgery. It is not one that is reliably shared among second-year residents.

The ethical basis of current surgical practice—Let's take a step back and look more broadly at our ethical responsibilities. In an environment where resources are unlimited, our responsibility is to provide the best possible care to the patient at hand. However, in a resource-limited environment, our responsibility is to do the most good for the collective. In other words, we are obligated to do the most good for the most number of people. I would argue that we are very much in a resource-limited environment. As I mentioned earlier, data from National Inpatient Sample (NIS), the ACS, National Surgical Quality Improvement Program (NSQIP), and the Society of Thoracic Surgeons database show that the majority of thoracic surgery is still being done by non-thoracic surgeons. This is not necessarily bad, as these non-thoracic surgeons are frequently performing relatively simple thoracic procedures with results that are quite good. However, these data do imply that there is a shortage of thoracic surgeons, and that there is an access-to-care problem with respect to thoracic surgery. Keep in mind that the scenario presented entails two patients who need anatomic resections for cancer, not tube thoracostomies for spontaneous pneumothoraces. In my opinion, these patients are best served by having a fully trained thoracic surgeon perform their surgery. The coverage arrangements that are described in the scenario are therefore

quite sensible, because they free-up Dr. Glinda to do what Dr. Glinda uniquely does best—thoracic surgery.

My one reservation about the scenario as described is that Dr. Glinda has not been properly introduced and oriented to this new environment. Working successfully at a new hospital requires an understanding of that hospital's capabilities and limitations. It also requires a surgeon to develop the relationships and familiarity to know where trust can be placed, and where vigilance is required. Showing up to a new environment, doing two major cases, and then turning the patients over to a surgeon that you just met that morning is a bad idea. It would be much better if Dr. Glinda worked side-by-side with her colleague at this outside hospital, before diving in head first.

Personal experience—In my personal practice outside of my academic medical center, I work four days per month, arranged as two 2-day stays. On the first day of each stay, I schedule major operations and spend that night in a hotel 5 minutes away. This is probably more for my own piece of mind than anything else, as I have never had to respond to a serious postoperative emergency in the five years that I have been working there. On the second day of my stay, I round on my postoperative patients, see office patients, and co-manage a multidisciplinary oncology conference. Preoperative evaluation is always done by me. In the OR, I am assisted by a board-certified general and acute/trauma care surgeon, who actually was a fellow resident of mine many years ago. He performed some thoracic surgery independently in a previous private practice. On afternoon of postoperative day 1, if all is going well, I turn over primary postoperative care responsibilities to this general surgeon and return home. We round collaboratively by phone daily, and I review all lab data and radiographs remotely.

The key to good outcomes under this scenario is successful delegation of responsibility. Successful delegation is a “force-multiplier” that allows a thoracic surgeon to touch positively many more lives that would otherwise be possible. It also requires constant monitoring and adjustment in a patient-specific manner, as over-delegation can be the downfall of an otherwise great surgeon.

CON

Alberto Ferreres, MD

The advice for Dr Glinda is simple and clear-cut: she should not accept the invitation to operate at the distant hospital.

This advice is justified on the following grounds, which I will further discuss below:

1. Surgical reasons, dealing with the rate of complications inherent to these procedures (lung resections);
2. Medicolegal and ethical reasons;
3. Lastly, the ACS Statement on Principles, since it is likely that Dr. Glinda is a Fellow of the ACS (the majority of practicing surgeons in the US are Fellows of the ACS).

The Meaning and Implications of Itinerant Surgery—The concept of “itinerant surgery” should be addressed in order to understand its implications. Itinerant means travelling from place to place, from the Latin *itinerare*, to travel. In old times, the itinerant barber surgeons were identified with the charlatans, who, according to the Cambridge Dictionary, were “persons who pretend to have skills or knowledge that they do not have, especially in medicine.” So itinerant surgery involves the performance of surgical operations under circumstances in which the responsibility for diagnosis or care of the patient is delegated to another colleague who is not fully qualified to undertake it. This concept clearly applies to the situation of Dr. Glinda and Dr. Lyon.

Itinerant surgery bears 3 features:

1. The surgery is performed on a patient unfamiliar to the surgeon: Dr Glinda will meet the patients only minutes before moving them into the operating room;
2. A long distance from usual practice, 75 miles away in this case;
3. The diagnosis and/or the pre- and postoperative care are delegated to another physician, in this case Dr. Lyon.

One of the most interesting examples of itinerant surgery was the radical hysterectomy of Eva Perón which took place on November 6, 1951, which was not performed by the team Evita thought she were operating, led by Dr. Finochietto. Instead Dr. George Pack took over the leadership, assisted by Drs. Albertelli and Mónaco. Evita did not know about the presence of Dr. Pack, a surgeon from Memorial Sloan Kettering Cancer Center. He stayed for less than 48 hours in Buenos Aires and played no role in the immediate postoperative care³. A few months later a similar situation occurred when Dr. James Poppen, a neurosurgeon from Lahey Clinic, performed a frontal lobotomy at the Presidential Residence due to Evita’s aberrant behavior and excruciating pain due to dissemination of her cancer, just one month before she died July 26, 1952⁴.

In 1989 in the US, the Office of the Inspector General (Department of Human Health and Services) also were concerned when a random sample of rural hospitals (72 of 1328) showed that cases performed by itinerant surgeons were characterized by a 16.3% incidence of adverse events; 70% were elective, and a surgical note was not present before anesthesia in 23%, and the preoperative workup was not adequate at a similar rate. The study concluded that the overall rate of poor-quality care was 26.6% in small rural hospitals that used itinerant surgeons, compared with 3.3% in other similar hospitals⁵.

Surgical complications and the surgeon’s legal and ethical duties—The incidence of complications after open thoracic procedures is 19.4%, and diminishes to 10.9% when the approach is thoracoscopic⁶. Post lobectomy early complications include, among others: air leak (15–18% incidence), pneumonia/ mucous plugging (6%), atrial fibrillation (10–40%), bleeding (2.9%), right middle lobe torsion (0.09–0.4%), chylothorax (0.7–2%), and the expected mortality is around 2.6%^{7,8}. The incidence of readmissions after thoracic surgery is about 7.4 %, according to NSQIP data⁹, similar to data reported by the Mayo Clinic¹⁰.

From the medico-legal point of view the surgeon's duties are obligations of means and kinds and not of results. In that sense the surgeon's liability starts in the preoperative stage of diagnostic work up and assessment to determine indications to perform a procedure, continues into the intraoperative stage — the performance of the operation — and the postoperative stage, including follow up, with diagnosis and management of complications. The obligations of the surgeon are successive, therefore, in the sense that the duties required are:

1. to accomplish a valid diagnosis and a surgical proposal grounded on evidence;
2. to perform the operation in a skilful fashion;
3. to complete the postoperative follow up.

In every stage, the surgeon is required to display competence and diligence according to “lex artis” and to achieve an adequate standard of care throughout all his or her participation in the care of a patient. Surgeons may be found liable when they deviate from the accepted standard of care, causing harm to the patient's health. This situation requires: a) a breach in the duty of care, b) harm or disability related to the infringement and c) a link of causality. An adequate standard of care may be defined as “prudence, care and adequate diligence, clinical judgment, ability, skill and competence that should be displayed by a reasonable surgeon in his or her duty of caring for a particular patient and the particular situation with respect to location, persons and resources.”¹¹ The appraisal of an adequate standard of care includes the assessment of all the steps in each particular case, starting with the surgical informed consent process, the surgical indication, the operative performance, and complete and thorough follow up, as well as the early diagnosis and management of complications and the avoidance of errors.

From an ethical point of view, it is important to acknowledge the rights of the patients which include being treated by a competent surgeon throughout the entire course of care¹². One of the five categories of surgical ethics, as defined by Little, is the presence of the surgeon, as a duty and as an exemplary virtue, during the whole process of healing¹³. In that sense it must be considered unethical to delegate the postoperative care and management to another colleague not fully trained or without equivalent credentials and expertise.

The ACS policy on itinerant surgery

The history of the ACS policy on itinerant surgery extends back over 50 years and includes the following landmarks:

- In 1960, the College adopted a policy after approximately six years of thoughtful consideration by several appointed committees.
- The following year, the Board of Regents reaffirmed the 1960 definition of itinerant surgery and noted that Fellows engaged in this practice should be subject to disciplinary action as of January 1, 1963.
- In the May-June 1962 issue of the ACS Bulletin, the Board of Regents reiterated its admonition that a surgeon should perform regular visits to his patient during the postoperative period, adding their belief that disciplinary actions must be

taken against those fellows who persist in a practice that is detrimental to the welfare of their patients.

- In 1964, the Board of Regents amended the ACS bylaws to provide that itinerant surgery would henceforth be a specific cause for disciplinary action. The bylaw provides that the Board of Regents may expel, call for the resignation of, or otherwise discipline any fellow engaged in this type of surgery.

According to the ACS Statement on Principles¹⁴, the bylaws regulating postoperative care and continuity of care apply to cases of itinerant surgery. The bylaws highlight the following:

1. The responsibility for the patient's postoperative care rests primarily with the operating surgeon;
2. The operating surgeon maintains a critical role in directing the care of the patient;
3. It is unethical for a surgeon to relinquish responsibility for postoperative surgical care to any other physician who is unqualified to provide similar care;
4. The surgeon's responsibility extends throughout the surgical illness.

In regard to the topic of continuity of care, the College establishes that an ethical surgeon should not perform elective surgery at a distance from the usual location where he or she operates without personal determination of the diagnosis and of the adequacy of preoperative preparation. Postoperative care should be rendered by the operating surgeon unless it is delegated to another physician who is equivalently qualified to continue this essential aspect of total surgical care.

These rules have been challenged. For example, Dr. Robert Koefoot and a group of surgeons from Nebraska challenged the rules in 1982, but the College was awarded a favorable ruling¹⁵. In the legal proceedings, the College was clear in stating that:

- the surgeon has a moral, ethical and legal obligation to give patients upon whom he has operated his personal attention and to attend his patients postoperatively;
- if Dr Koefoot chooses not to drive the required distance to see his patients, if Dr Koefoot disagrees with the College policy, or if Dr Koefoot chooses to spend his time on pursuits other than surgery, that is certainly his choice, but
- then he may not call himself a Fellow of the American College of Surgeons.

In a similar fashion the Royal College of Physicians and Surgeons of Canada resolved in their Council meeting in Ottawa on January 17, 1961 the following: "Be it resolved that this Council condemns itinerant surgery as defined above as being detrimental to the best interests of the patient and contradictory to the present concepts of comprehensive surgical care." ¹⁶

In conclusion, Dr. Glinda should not accept the invitation to operate at a distant hospital due to reasons focused on the quality of delivered surgical care as well as medical, legal and

ethical grounds. Last but not the least, if Dr. Glinda is a Fellow of the ACS, accepting Dr. Oz's request would violate the ACS bylaws and would form the basis for her expulsion.

CONCLUDING REMARKS

Robert M. Sade, MD

The essayists do not disagree on the possibility of doing remote surgery and turning over postoperative care to another surgeon. Their disagreement is over what qualifications are necessary in the substitute surgeon to justify being absent for much of the postoperative period.

Imagine this same vignette, but the distant surgery takes place in a 100-bed hospital that does not have a full-time general surgeon. Postoperative coverage will be provided by ICU nurses after the thoracic surgeon leaves. I believe there would be little disagreement that this arrangement would be unacceptable.

Ferreres cites ACS policy in support of his position that a general surgeon is insufficient to replace the thoracic surgeon. Here is specifically what the ACS Statement on Principles states:¹⁴ "Except in unusual circumstances, it is unethical for a surgeon to relinquish responsibility for the postoperative surgical care to any other physician who was unqualified to provide similar surgical care." What does "unqualified" mean?

The policy provides more specificity: "If the operating surgeon must be absent during a portion of the critical postoperative period, coverage should be provided by another surgeon who is skilled and who can render surgical care — including reoperation, if necessary — equivalent to that provided by the surgeon who performed the operation." What does "equivalent" mean exactly?

In light of the ACS's position, what should be the qualification for the surgeon who would be left to care for the patient in our vignette? Should the minimum standard be a board-certified thoracic surgeon? A fully trained thoracic surgeon who is not yet board-certified? A general surgeon who has done a substantial amount of thoracic surgery (as in Allan's personal experience), and what would be a "substantial amount"? A general surgeon who has done little thoracic surgery but is board-certified in general surgery? A family medicine physician who does surgery at the small hospital?

The ACS policy attempts to set a guideline for surgeons who turn over postoperative care to others, including those who operate at remote hospitals. This vignette and debate make it clear that the question of the substitute surgeon's qualifications cannot be definitively resolved by leaving it to the operating surgeon's judgment. A more specific blanket rule to cover every case is unlikely to satisfy all interested parties, but that is precisely what seems to be needed. In light of the ambiguity of its current policy and the realities of contemporary hospital alliances and surgical practices, perhaps it is time for the ACS to consider clarifying or altering the section of its Statement of Principles that addresses substitute surgical care.

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