The Surgical Intensivist as Mediator of End-of-Life Issues in the Care of Critically Ill Patients

Soumitra R Eachempati, MD, FACS, Franklin G Miller, Ph.D, Joseph J Fins, MD

Current practitioners in surgical intensive care need to be versed in a wide variety of roles. These providers must treat complex pathophysiologic insults, investigate causes of organ dysfunction, and counsel grieving families. The term surgical intensivist refers to the individual who practices intensive care in the surgical intensive care unit. Commonly, this individual oversees the surgical intensive care unit (SICU) team, comprised of residents, nurses, students, and therapists, who manage critically ill surgical patients. Consequently, other roles of the surgical intensivist include those of a teacher and manager.

In surgical intensive care units, multiple physicians frequently follow and assist in managing critically ill patients. Because different groups of physicians manage and consult on a single patient in the SICU setting, conflicts between different practitioners may invariably arise. As a result, surgical intensivists may also be placed in the additional roles of mediator or arbiter to assist in resolving these conflicts.

In this article, we will explore the role of the surgical intensivist in an SICU setting. In particular, we will discuss the surgical intensivist’s involvement in end-of-life care. We will show how the surgical intensivist can act successfully as a mediator of end-of-life disputes by discussing a case where a family’s ambivalence about care options was complicated by disagreement among the patient’s treating physicians. We will especially focus on the role of the surgical intensivist in the circumstance where surgical treatment has been performed. We will show that the surgical intensivist’s background as a trained surgeon positions this individual to help clarify goals of care at the end of life and engage in successful conflict resolution.

Case presentation
This case is a composite of multiple cases seen by the lead author. A 72-year-old man with metastatic colon cancer was admitted to a university hospital with melena and hematemesis. This upper gastrointestinal bleed was thought to be unrelated to his underlying malignancy. He had prepared a living will stating he did not wish to be kept alive by artificial methods or extraordinary support should he have a minimal chance of meaningful survival. Additionally, he had established his wife as his healthcare proxy and requested a do-not-resuscitate order (DNR) be placed in his medical chart.

He was admitted with a hemoglobin of 5.8 g/dL to the medical intensive care unit (MICU). His long-standing primary care internist, who had helped prepare his advance directive, reasoned that the patient should not receive any further therapy, including blood products or invasive interventions. Nonetheless, the patient, who still retained decision making capacity, said he would want initial treatment to determine the cause of his bleeding. To that end he received three units of packed red blood cells and underwent an endoscopic procedure for which he provided consent. The patient hoped that this procedure could definitively control the bleeding.

Because of continued hemorrhaging, the patient was intubated for airway protection before endoscopy. On endoscopy a bleeding duodenal ulcer with a visible vessel was identified and cauterized. After the procedure, the patient remained intubated to facilitate a repeat study for the management of further bleeding. Given the patient’s condition, the MICU attending physician or “medical intensivist” also consulted general surgery for potential surgical backup.

At this point the medical intensivist approached the patient’s wife regarding care options because the patient lacked decisional capacity and she was his healthcare agent. The medical intensivist now shared the view of the primary care internist and voiced the opinion that no other interventions should be entertained. The patient’s wife understood the situation but at this time wanted the...
physicians to pursue all interventions. Later that morning the patient started having more gastrointestinal bleeding. The general surgeon, who had been consulted after the endoscopy, evaluated the patient and determined the patient needed emergent surgery to control the bleeding ulcer. After discussing the case with the patient’s wife, she reluctantly agreed to the surgery. Subsequently, the patient underwent a vagotomy and pyloroplasty with ligation of the bleeding vessel in the ulcer.

Postoperatively, the patient was transferred to the SICU where he began to develop worsening renal function and persistent hypotension. The SICU team started the patient on inotropic support for blood pressure maintenance and placed a pulmonary artery catheter for hemodynamic monitoring. At this point, the patient’s internist saw that the patient was faring poorly and recommended comfort care measures along with withdrawal of life-sustaining therapy to the patient’s wife. The operating surgeon told the wife he wanted to continue all supportive measures because he believed the bleeding was finally controlled and her husband still had a chance at recovering from the operation. Resident physicians and nurses in the SICU gave her additional opinions as to her husband’s prognosis.

The patient’s wife was distraught by the disparity of information and requested to speak to the SICU attending physician. She told him that she believed that her husband would not have wanted such life-sustaining therapy if he were this ill. She was confused by the different evaluations of the patient’s internist and the surgeon. Understanding the complexity of the situation, the surgical intensivist assured her that he would discuss the matter with the other physicians.

The surgical intensivist organized a team meeting so that all parties could clarify the medical facts and the patient’s prognosis. The consensus from this meeting was that the patient might benefit from a reasonable period of continued full support because he had already received aggressive therapy in the form of an operation. If he did not respond during this time, the group believed the appropriate next step would be to withdraw all life-sustaining therapy. The group also agreed that the surgical intensivist should represent the SICU team to minimize the risk of miscommunication to the patient’s wife.

The patient’s wife appreciated this consolidated opinion and the treatment plan. She believed that the proposed plan provided the option for the patient to improve while allowing all to avoid the prolongation of an inevitable death. Over the next week, however, the patient deteriorated despite the aggressive support. In light of all the previous discussions, the surgical intensivist suggested to the patient’s wife that she should now strongly consider withdrawing all life-sustaining measures for her husband. After careful consideration and discussion with the rest of her family, she agreed. The withdrawal of support was initiated and the patient died shortly thereafter.

**Case discussion**

For some time, clinicians have recognized that the optimal treatment strategies at times of critical illness can be controversial.1,2 This case illustrated how major conflicts in the philosophy of patient care and treatment plans may arise in modern intensive care units. In this case, the dispute centered on the interpretation of the patient’s previously expressed wishes. The patient had consented to an endoscopic procedure to treat acute hemorrhage, but he had instructed his healthcare agent to avoid aggressive measures both verbally and in his living will. When the patient lost capacity, his wife had to interpret his wishes in the context of a complex and evolving clinical situation. She agreed to both surgery and a time-limited course of SICU care, in seeming contradiction to her husband’s wishes, in order to reverse a life-threatening condition that was unrelated to the primary reason for the development of the living will, the colonic carcinoma.

Several events contributed to the potentially inappropriate treatment in this patient. First, the patient himself sought medical care after the onset of critical illness. While being uncomfortable and in distress, he initially hoped the hospitalization would correct an isolated problem and still allow him some meaningful survival. But although he came for directed care and agreed solely to endoscopy, therapeutic interventions escalated once he lost capacity. Reasoning that he had effectively consented to therapy for his gastrointestinal bleeding, the clinicians found the supportive interventions to be appropriate.

Multiple parties were responsible for continuing invasive interventions after the onset of critical illness for this patient. Despite the recommendation of the internist, the medical intensivist did not refuse admission to intensive care and was liberal in the use of blood products to the patient and specialty consults. Specialty con-
sultants also recommended invasive interventions. Additionally, the surgical intensivist could have initially been more supportive of a noninterventional approach for the patient’s critical illness. Importantly, although the various practitioners were recommending invasive therapies, the patient’s wife, as his healthcare agent, could have refused to consent to any of these procedures once the patient lost capacity.

This unusual treatment dynamic was catalyzed by each of the different physicians acting in the various roles in which he or she was trained. Each attending physician tried to act on behalf of the patient, but the group of physicians collectively created confusion by altering goals concerning proportionate care at different stages in the disease trajectory. If we can better understand the backgrounds and ethical obligations of each of the specialists, we might be in a better position to understand the origin and the management of patient care conflicts in the critical care setting.

Role of the primary care provider in end-of-life decision-making
In our case, the primary care provider advocated against invasive interventions more than the other practitioners. The actions of this primary care provider can be better understood by studying the constitution of this type of practitioner. The primary care provider can often become the physician who is emotionally closest to a patient by having a relationship cultivated over a long period of time. When a patient develops a serious illness in the outpatient setting, the person most likely to order the diagnostic tests and direct the medical management is the primary care provider. If a potentially life-threatening condition arises, such as cancer or congestive heart failure, the patient can usually confide his views on end-of-life issues to the primary care provider in a relatively relaxed outpatient setting. In this outpatient setting, the patient is lucid and can interact with the primary care provider to discuss all pertinent questions regarding end-of-life matters.

When a patient becomes critically ill for a nonsurgical condition, he or she is usually taken to a medical ICU. At this point, depending on the institution, the primary care provider usually defers all management to the intensive care unit team. The degree of critical illness managed in these units has become extremely complex; as new therapies have surfaced in the last decade regarding ventilator management, pharmacologic interventions, and newer monitoring techniques. As a result, the primary care provider may not be familiar with all the current technology and clinical strategies. So, although the primary medical provider is traditionally the individual most likely to have a better relationship with the patient than any other medical personnel, this individual may not necessarily be sufficiently empowered to effectuate the best management strategies during an end-of-life crisis.

In our case, the internist was the only physician who knew the patient before the onset of critical illness. Nevertheless, his opinion was obscured as multiple ICU practitioners and specialists started participating in the patient’s care. The internist also was one of the only physicians who actually conversed with the patient himself during the hospital admission, although this event occurred during a brief discussion with the gastroenterologist while the patient was in distress.

Therefore in our case, the internist’s primary ethical obligations to the patient were to minimize harm and respect the patient’s autonomy. His main objective was to avoid continued aggressive measures he considered futile and to prevent interventions the patient would not have wanted. Also, he supported comfort care for humane reasons once the patient became critically ill. Notably, at the time of critical illness, this practitioner had less disease-related medical advice to offer because he was not trained in the areas of critical care or surgery.

Surgical perspective on end-of-life issues
Because of the nature of their practices, surgical providers have different relationships with patients than medical providers. Their initial encounters with patients are frequently by specialty referrals for management of specific problems that other practitioners cannot treat. Because so many interventions of different surgical subspecialists overtly correct life-threatening pathology, these individuals may sometimes perceive themselves as ultimate problem solvers.

For their part, surgeons can sometimes dramatically alter acute patient pathology in diseases such as cancer, coronary artery disease, or infection. As a result, the perception of surgeons has long been generally favorable. For years they were the object of public adulation because they performed under the spotlight in the open operating theaters. In the early cardiac bypass days as noted by Bosk, some surgeons used to whisper in their patient’s ears, “You’re alive, you’re alive” as if they per-
formed some Jesus-like miracle to the dead Lazarus. For some patients, the inability of a surgeon to provide therapeutic intervention may imply that no successful treatment is available for the patient’s pathology.13

In our case, the surgeon wanted to continue supportive care postoperatively despite the poor status of the patient in contradistinction to the explicit statements of the advance directive. To understand the surgeon’s motivations here, one has to understand how perceived obligations change after a surgeon has operated on a patient. Before an operation, surgeons normally counsel patients and families regarding the risks and benefits of surgery. Clearly, conscientious surgeons have to believe the benefits of the operation in question outweigh its risks.

In advocating a particular therapy, a surgeon must take a stand that can be concretely scrutinized and critiqued later. Indeed the American surgical culture has been vastly influenced by academic morbidity and mor-tality conferences that perform this very function. So, the performance of an individual surgeon is vulnerable to second-guessing by a patient, a patient’s family, or other physicians. To ensure the best outcomes and prevent these secondary difficulties, surgeons may be particularly possessive of their patients after a major operation. Consequently, even after the onset of irresolvable critical illness, surgeons may maintain a more resolute obligation to the preservation of life in the postoperative period. This exact situation occurred in our case, and unfortunately, those views conflicted with an existing advance directive by the patient.

The professional investment that surgeons have in their patients affects other aspects of postoperative care. After the onset of postoperative critical illness, surgeons stay intimately involved in the decision-making process, in contrast to the limited role of many primary care providers in nonsurgical critical illness.14 Even when their patients are admitted into the SICU, surgeons maintain control of some of the most important therapeutic decisions. These decisions include such important areas as the need for reoperation, the method of managing surgical wounds, and the restitution of oral feeding. Because surgeons control management in these important areas of patient care, many family members might still consider the surgeon to be the primary managing physician for the SICU patient.

Other factors may influence a surgeon’s postoperative decision making. Surgeons may feel a host of complex emotions when their patients become critically ill in the postoperative period. Although all providers may feel considerable responsibility for the welfare of their patients, we have discussed why many surgeons may heighten this responsibility.15,16 Being human, a surgeon may consider himself responsible for providing a technically imperfect operation or for inappropriately recommending the decision to operate, even though management in these areas may have been sound. Also, for individuals with the self confidence typical of any provider, but particularly a surgeon, a poor outcome can pose a threat to their egos. To compensate for these possible influences of guilt, responsibility, and ego alienation, the operating surgeon may resist discussing end-of-life issues when patients start faring poorly in the postoperative period. In our case, the surgeon might have focused excessively on whether the operation had successfully controlled the instigating bleed rather than whether withdrawal of care was appropriate.

Other more furtive factors can influence a surgeon’s perspective on end-of-life issues. The mode of patient acquisition greatly affects the relationship between the surgeon, the patient, and the patient’s family. To continue receiving medical referrals, some surgeons may not want to be perceived as having failed their patients.17 Other surgeons may believe, rightly or wrongly, they do not want to maintain an appearance of abandoning their patients once critical illness sets in. A different group of surgeons may not want their “numbers ruined” by an occasional bad outcome. This last sentiment might become more widespread as regulatory bodies use database-derived outcomes to categorize practitioners. Still other more narcissistic but less realistic surgeons may feel that all patients they operate on could ultimately survive any medical ordeal.

Many surgeons do not extensively elaborate on all potential complications in most types of elective surgery when they are securing patient consent for the anticipated procedure. They might not want to alarm their patients, who sometimes already are so upset they cannot sleep before operations. Also, the surgeons may not wish to appear lacking confidence in themselves for fear that the patient may go to another surgeon. Similarly, surgeons rarely discuss the patient’s wishes regarding end-of-life issues before any operation.18 Often a patient is reluctant to undergo an operation, but the surgeon, recognizing the need for the procedure, has to convince the patient and the family that the surgery is essential.
When a complication does arise, the surgeon who has already professed a commitment to ensure the patient’s welfare in the postoperative state, may feel obligated to pursue all treatments to improve the patient’s condition. In this scenario, the surgeon may be more inclined than other types of physicians to pursue all interventions during a time of postoperative critical illness.

In summary, surgeons maintain a complex set of obligations to patients, referring physicians, and themselves. These professional and personal commitments may make it difficult for surgeons to make the transition from aggressive treatment to comfort care when their patients enter times of critical irreversible illness.

The perspective of the medical and surgical intensivists

A special set of circumstances place medical and surgical intensivists in a unique position regarding the care of critically ill patients. These physicians are most properly positioned to conduct appropriate end-of-life care for these patients, and they have additional experience in all aspects of critical care. Their lack of a previous relationship to the patients and their families may actually be a boon in that they are perceived as specialists trained to combat acute illnesses. Because they are not commonly the surgeons who performed the operative procedure related to the patient’s critical illness, surgical intensivists may be regarded as objective. Unlike other physicians who practice primarily in office settings, intensivists spend much of their time near the patient’s bedside. Consequently, they may be more accessible to critically ill patients and families than their physician colleagues.

The surgical intensivist, by virtue of his or her background and training, is perhaps best able to appreciate the perspectives of both medical and surgical colleagues. Although some intensivists who practice in surgical ICUs have an internal medicine background, most have been trained in general surgery or anesthesia. Even though they have been acculturated to using critical care interventions to facilitate good outcomes, their experience also includes significant palliative perspectives.

So the unique culture of an SICU leads to distinct conduct of end-of-life issues.19 In our case, the medical intensivist was more concerned about the advance directive than many of the other involved attending physicians. This physician wanted to withhold some of the more aggressive treatment from the initial ICU admission. The surgical intensivist, on the other hand, seemed to understand the implications of the advanced directive, but felt compelled to recommend continued supportive care once an aggressive measure (ie, surgery) had already been initiated.

Although seemingly disparate, both approaches may be considered in certain ways properly constructed.20 The medical intensivist felt the obligation to carry out the patient’s advance directive with the assumption that additional therapy would be futile. The surgical intensivist also considered the advance directive, but did not initially know with certainty that the patient’s prognosis was terminal. He reached the position eventually by managing the patient and calling on his experience as a surgeon and a surgical intensivist. As a practicing surgeon himself, his thoughts were deemed particularly credible by the operating surgeon, and as someone involved with critical care, he was also credible to the medical intensivist. But because he was neither the operating surgeon nor the primary medical physician, all parties considered him relatively neutral.

The surgical intensivist could have contributed even more to the optimization of care in our case presentation. He could have used his knowledge of critical illness severity to educate his surgical colleague earlier in the postoperative state than the collective team meeting. This type of collaboration might have allowed the surgical intensivist and surgeon to provide more timely and balanced input to the patient’s wife before the overt manifestation of unsurvivable illness. The surgical intensivist could also have provided more information to the patient’s internist. Although the team meeting eventually solved some of these problems, the surgical intensivist, by virtue of his experience, could perhaps have anticipated the development of multiple organ dysfunction syndrome and facilitated all parties to recognize realistic treatment goals.

So at times of serious management conflicts in a surgical intensive unit, the SICU attending can be placed in a position of enormous power and responsibility. The surgical intensivist should be uniquely qualified to gauge the patient’s illness, assess the likelihood of futility, understand the advance directive, and mediate the choice of a satisfactory management plan. An outline of the roles and functions of the optimal surgical intensivist is delineated in Table 1.
Management of complex surgical patients.

The potential roles of the surgical intensivist will not be fully realized unless these practitioners have an adequate educational background. In addition to knowing the intricacies of complex management strategies, we believe these physicians should be duly qualified in clinical ethics, conflict resolution, and palliative care. Educational tools used to instruct medical students and residents regarding palliative care have already been developed.\(^{21,22}\) The importance of these educational domains for the surgical intensivist warrant their inclusion in surgical board specialty certification and surgical critical care subspecialty examinations. These latter strategies will help ensure that current and future practitioners of surgery and surgical critical care will maintain the particular knowledge, skills, and attributes necessary for the management of complex surgical patients.

**Educational implications**

**Further areas of study**

Although end-of-life decision making in the medical ICU setting has been extensively studied,\(^{23–28}\) little research has been devoted to this topic in the SICU setting. Of particular interest is understanding the nature and resolution of conflicts between practitioners. But SICU conflicts involve many topics beside end-of-life care. Physicians can differ on virtually every aspect of management including mode of ventilator weaning, fluid resuscitation, antibiotic use, and even need for SICU admission. As seen in our case, the SICU attending physician frequently has to help resolve physician differences to facilitate patient care. A difficult but potentially vital area of study would investigate how the role of the SICU attending physician as mediator and arbiter in ICU issues affects the efficiency and quality of patient care and outcomes. Research on these topics should help improve decision making and overall care in surgical intensive care units and define the optimal role of SICU attendings in the management of critically ill surgical patients.

**REFERENCES**

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The death of the patient. What is new in this retelling is consensus that limits time, aggressiveness, or both; and "little longer and let us try another treatment . . ."

Drs Eachempati, Miller, and Fins revisit the Journal of the American College of Surgeons, Editors eachempati et al Vol. 197, No. 5, November 2003

The players are familiar: a patient who has chosen to live free of life support, or die; some caregivers who see a patient too sick to live while others think the patient too well to die; and a family trying to grapple with the moonscape of the ICU. The drama is familiar: a surgeon invoking the slimmest hope for recovery; the family struggling to comprehend what is seen and heard; a crisis that juxtaposes ambiguities of the moral world (“Is this what our loved one wanted?”) with the technical world (“There might be a chance if you hang in there just a little longer and let us try another treatment . . .”).¹ a consensus that limits time, aggressiveness, or both; and the death of the patient. What is new in this retelling is analysis and a proposed resolution.

The covenant of care
The authors opine that the surgeon-patient relationship differs from the relationship that a patient has with the physician. That a difference exists cannot be denied. The authors suggest that the obligations of a surgeon to the patient change—or at least are perceived to have changed—after an operation is performed. Here, we disagree. We have elsewhere suggested that the nature of the surgeon-patient relationship is covenantal, and that surgery (or the decision not to operate) simply fulfills surgeons’ unilateral promise to patients: “I will care for you.”²

The notion that surgeons pursue quixotic postoperative care simply to avoid appearing at a morbidity and mortality conference or to improve outcomes reports seems difficult to support. Surgeons are never forced to operate, and better outcomes can always be assured by selectively operating on low-risk patients, yet risky procedures are commonly performed. Prominent surgeons state that they would violate expressed wishes of a patient not to undergo amputation if those surgeons thought amputation was in the patient’s best interest; they would take on the risk even if the patient categorically refused to consider surgery.³ To break the covenant of care—to abandon the patient at the hour of greatest need while others argue to let the patient “die with dignity”—is more shameful than even the failure of the surgeon to accomplish the “expected miracle.”⁴ So it is hardly surprising—indeed it is somewhat reassuring—that surgeons so strongly resist revising the goal of care from “cure” to “comfort.”

The need for mediation
The authors suggest mediation as a route to resolution of conflicts that surround end-of-life care, and further suggest that the surgical intensivist is generally well positioned to serve as mediator. Whether the activity at an end-of-life conference is more mediation or facilitation is a heuristic as much as a semantic distinction: conflict resolution generally does not occur without a guided discussion of possible interventions and outcomes. Mediator or facilitator, someone needs to play that guiding role. The SUPPORT study suggested that it should not be a nurse, and there are other studies that suggest that a physician is probably best suited to facilitate discussions of such complex topics.⁶,⁷

The question is, which physician? We disagree that the surgical intensivist is commonly seen as an unbiased...