Should a surgeon comply with hospital administration's demand to change valve preference?

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Hospital administrators now challenge surgeons' preference for cardiac devices.

Central Message

Surgeons' traditional power to choose the devices they prefer has been partially transferred to hospital administrators. How should surgeons balance obligations to patients and to medical centers?

INTRODUCTION: ROBERT M. SADE, MD

Surgeons historically had virtually unchallenged power to choose whatever instruments or devices they preferred, but the economic realities of recent decades have led to the transfer of much power into the hands of hospital administrators. The dilemma for surgeons is how to deal with the delicate balance between their obligations to the health of their patients and their obligations to help sustain a medical center's financial health. The following vignette illustrates just such a quandary.

The Case of the Challenged Valve

Dr Sophie Streep is a young cardiac surgeon who has been practicing for several years but only recently joined the St Helens medical staff. The hospital has purchased software that allows detailed cost comparisons among surgeons and intends to use these data to steer cases toward the lowest-cost surgeons and to use them in the privileging process, a move that worries many of the specialists at the hospital.

To make matters worse, the hospital has contracted with a major medical device company to provide prosthetic aortic valves at a significantly reduced cost as long as the hospital agrees to use these particular devices for at least 80% of their valve replacements. Under the terms of the contract, if the hospital meets the quota, the device company provides a substantial rebate.

Dr Streep is one of a minority of cardiac surgeons at St Helens who preferentially use a competing brand of prosthetic aortic valve. She believes that her preferred valve results in somewhat lower gradients, better durability, and better long-term results for her patients.

As the end of the fiscal quarter nears, the purchasing department advises Dr Streep that the hospital is in danger of failing to make their quota and therefore of losing their rebate. The hospital administration asks her to begin using the contract-preferred valve instead of her usual heart valve. She knows it is likely that if she continues to use her preferred valve, she will receive a lower income as cases are referred to other surgeons. Moreover, her costs associated with valve replacement will be higher, risking reduction of operating privileges or even removal from the medical staff.

Should Dr Streep comply with the hospital administration's request?

PRO: SCOTT MILLIKAN, MD

Our surgical colleague should comply with her hospital's request and change valve preferences. In doing so, she continues to fulfill her ethical duties to her patients and she concurrently benefits her community as well. In addition, she and her surgical colleagues should use some alternative strategies to improve physician-hospital relationships at her institution.

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The Landscape

The difficult landscape in which Dr Streep finds herself is clear and common to all of us. The cost of health care delivery is enormous and continually rising. The United States spends more than \$9000 per year per person maintaining health. The share of economic activity (gross domestic product) devoted to health care has increased from 6.9% in 1970 to nearly 18% some 44 years later. Health care spending per capita in the United States has increased 5-fold in constant 2014 dollars during the last 4 decades.¹ This expenditure outstrips that of all other industrialized countries, and with questionable value. Many have called these trends unsustainable. These same trends have also driven calls for seismic change in health care delivery and have driven multiple new strategies under the rubric of “health care reform,” both nationally and at the local level.

Hospitals and health care systems are in the eye of the storm. They are responding to managing cost of care in new and myriad ways. Hospital economic performance in recent years has been hampered by declining patient volumes, dropping patient revenue, and impaired growth, along with expenses that outpace revenue, resulting in decreasing margins. The incentive to manage cost has never been greater and will not go away. To that end, hospitals have begun to rely on computer software solutions that accurately characterize cost on a per day, per procedure, and per provider basis. More and more hospitals are using these software packages for what they term “acute performance management.”^{2,3}

Some organizations have gone so far as to tie physicians’ economic performance and other economic parameters to hospital credentialing and privileging (a practice for which the American Medical Association coined the term “economic credentialing”). No established rules or laws concerning economic credentialing apply universally to all states—medical staff bylaws and individual state statutes regulate the process. Some medical staff bylaws explicitly allow economic credentialing. Various states’ statutes expressly allow or restrict the practice. As expected, these efforts have been vigorously opposed by the American Medical Association, as well as many other medical societies.⁴ Some have opined, however, that there are few legal impediments to hospitals’ use of economic credentialing if a few narrow areas of legal risk are avoided.⁵ In addition, the advent of Accountable Care Organizations is predicted to increase the practice of steering patients to “lower cost providers” as another way to manage cost.⁶ Dr Streep and her colleagues are worried about the potential use of these and other hardball tactics by the St Helen’s hospital administration. I believe that these strategies, if coercive, are counterproductive to the well-being of any hospital and, by extension, the well-being of the patients in the community they serve.

The Surgeon-Hospital Disconnect

Even so, there can be no surprise that Dr Streep’s institution has entered into a contract that rewards the hospital for higher usage rates of a particular brand of heart valve. The hospital administration is simply applying Sutton’s law and “going where the money is.” Prosthetic heart valves are, in the lexicon of supply chain managers, an example of physician preference items (PPIs). Overall, supplies represent an escalating cost center for hospitals. Supply costs represent as much as 31% of a hospital’s total cost per case, and as much as 61% of total supply expenditures are for PPIs.⁷ In addition, there remains significant opacity regarding contractual arrangements between various suppliers and hospitals, leading to wide variations in pricing.⁸ A significant portion of the PPI universe is represented by prosthetic heart valves. The global prosthetic heart valve market was valued at \$5.6 billion in 2016 and was expected to grow to \$10.35 billion by the end of 2022 (a compound annual growth rate of 13%).⁹ There should be no surprise that hospitals have a strong vested interest in managing costs around PPIs, including prosthetic heart valves. Surgeon decisions regarding heart valve choice, however, are generally based on factors unrelated to cost. There thus may be a significant disconnect between a hospital’s cost-containment goals and surgeon brand preferences.

At St Helen’s, this “disconnect” has trickled down to the medical staff level, fueling distrust and potential conflict. Conflicts between professional powers and organizational control are not new.^{10,11} Because hospitals now face accelerating financial pressure, however, they are trying to alter the nature and degree of physician autonomy without excessively reducing physicians’ commitment to the organization.⁷ Unfortunately, get-tough strategies by hospital administrations are fertile ground for accelerating conflict among physicians and hospital organizations.

Is St Helen’s Hospital suffering from what recent American College of Cardiology president Kim Williams calls one of the seven deadly sins of health care, simple greed?¹² I do not think so. Although one may abhor hardball tactics and short-sighted strategies of hospital staff coercion, the goals of careful resource management is probably wise, and may even appeal to our sense of fair and just allocation of limited health care resources. The American College of Health Care Executives’ code of ethics states that the fundamental objectives of the health care management profession are to maintain overall quality of life, dignity, and well-being of every individual needing health care service *and* to create a more equitable, accessible, effective, and efficient health care system.¹³ The mission of the American Hospital Association (AHA) is to advance the health of individuals *and* communities.¹⁴ The fiduciary duty of hospital boards of trustees would mirror these sensibilities.

Professional Obligations

Clearly, hospitals and their surrogates have a duty to balance service to individuals and service to the communities they serve as a whole. We cannot fault them for that. Physicians, as well, are bound by certain duties. These are well defined in the charter on medical professionalism. The charter guides us to 3 main principles: (1) the primacy of patient welfare, (2) patient autonomy, and (3) the principle of social justice. These principles are framed and augmented with a set of 10 professional responsibilities, including commitments to improving quality of care, to improving access to care, and to a just distribution of finite resources.¹⁵

All these principles and responsibilities are based on trust. They are all based on the notion that we will do what is right for our patients and society at large at the expense of our own self-interest. That is what we signed up for.¹⁶

For Dr Streep's patients, the choice of a prosthetic aortic valve is an important one with significant short- and long-term implications. She believes that her valve brand preference is the best option for her patients. Does she also believe, however, that her other colleagues, including the majority of surgeons at her hospital and thousands of other cardiac surgeons the world over, are simply ill-informed or misguided regarding alternative valve preferences? Does she believe that they are acting in an unethical manner by implanting a different valve brand? Does she believe that her choice is the only acceptable choice? Because she believes her choice to be the best, does that mean that her choice *is* the best? The literature around which valve brand is in fact best is certainly not conclusive.

A surgeon's brand of choice can be driven by an array of factors. Some are valve related, such as gradient, durability, ease of implantation, thrombogenicity, and so forth. Individual patient variables play a critical role. Sometimes, choice is driven by surgeon-related factors, such as familiarity, resistance to change, and so on. At times, consulting arrangements may be a factor in valve choice. Relationships with vendors may influence these decisions as well. Cost, on the other hand, has generally not ranked high on the surgeon's radar as a discriminator driving brand choice. Most cardiac surgeons recognize that within any particular class of aortic prosthesis, mechanical or biological, there is no overwhelming consensus among surgeons for a particular brand choice. It can safely be inferred that among cardiac surgeons—a presumably moral and ethical community—there is a “bandwidth of acceptability” regarding valve brands. It follows that if the valve brand that Dr Streep is asked to implant is within this range of acceptability (a determination that only she can make), then implanting that alternative valve brand fulfills her duties to her patients. In addition, by implanting a more economical valve, Dr Streep, albeit in a small way, is

promoting the fair distribution of limited health care resources, appealing to our sense of social justice, a fundamental principle of medical professionalism.

Conflicting Obligations

Dr Streep feels that she faces risks should she not comply with the hospital's request. She clearly has a significant conflict of interest, pitting her primary interest—that of her patients—against her secondary interests, such as the risks of loss of operating privileges and possible removal from the medical staff. Other potential risks include loss of income, loss of reputation, risk to family, and so forth. These issues may become more acute for her if, like an increasing number of us, she is employed by the hospital. Dr Streep cannot, however, put these secondary issues ahead of her patients' well-being. The primacy of patient welfare is a fundamental tenet of medical professionalism. The principle is based on a dedication to serve in the interest of the patient. It is based on altruism, and it is this altruism that contributes to the trust that is central to the physician-patient relationship.

Although patients come first, Dr Streep's duties, however, also go beyond the interest of her patients with aortic valve disease. Responsibilities extend to the larger community that she serves. The charter on medical professionalism reminds us that as part of our commitment to a just distribution of finite resources, we are required to provide health care that is based on the wise and cost-effective management of limited clinical resources.¹⁵

Our professional societies have weighed in on these issues. The American Association for Thoracic Surgery (AATS) is clear on this point. Members should aspire to emulate the motto “we model excellence” while holding onto the American Association for Thoracic Surgery core values, one of which is professionalism. Under the American Association for Thoracic Surgery code of ethics, physicians must, when caring for patients, hold the patient's welfare paramount. In addition, members should also responsibly steward the use of health care resources under their supervision.¹⁷ The Society of Thoracic Surgeons follows suit as well, also citing professionalism as one of its core values.¹⁸ I would agree with Society of Thoracic Surgeons past president, Dr John Mayer, that “most importantly, we must consistently argue for a health care system that engages us as members of a profession with responsibilities to our patient as healers, but also with responsibilities to society as a whole.”¹⁹

To that end, Dr Streep and her colleagues should engage with their hospital administration to ensure that the best interests of the patients remain paramount in the context of the larger community they serve. As Dr Robert Sade reminds us, hospitals and physicians have similar stakeholders; however, the various stake holders may

occupy different positions on their respective ethical hierarchies.²⁰ Although the primary obligation of physicians should be to their patients, not to society, physicians and hospitals together should strive to find a balance, weighing benefits to patients and community alike. Hospitals should actively engage and welcome physicians into policy discussions. Physicians should respond in kind.

Patients, as well as whole communities, stand to gain from emerging models of integrated leadership, where hospitals and physicians work together more effectively. In 2015, the American Medical Association and the AHA published a white paper recognizing and emphasizing the importance of integrated leadership models as the delivery of health care evolves.²¹ The AHA has recognized that patients and communities benefit when physicians have a “seat at the table.” The AHA also sees integrated leadership as a key to substantial health care reform.

In summary, rather than being “asked” to change product preferences, Dr Streep and other surgeons at her hospital should work to be part of the decision process in implementing various PPIs, as well as other policy decisions. Hospital administration would be wise to listen to their surgeons carefully, because surgeons are in the best position to determine what is medically best for their mutual patients. Finally, Dr Streep fulfills her ethical duties to her patients by utilizing an alternative prosthesis that is an acceptable substitute.

CON: GREGORY TRACHIOTIS, MD

Dr Streep should not change her valve preference to comply with her hospital’s request. Since the beginning of our career, we have been taught that the patient’s well-being is paramount. Dr Streep has been put in an uncomfortable position in which the hospital administration is coercing her to use an alternative device that, according to her judgment, will provide less benefit to the patient than the one she prefers to use. It is well known that hospital costs are in constant growth, and that their economic sustainability has become a challenge. This should not be a reason to decrease the quality of care provided to the patients by implementing the use of a low-cost device (in this case, a prosthetic heart valve) that seems to be inferior to its competitors.

Conflicting Obligations

Conflict of interest defines a situation in which an individual has more than one competing interest in the performance or outcome of an endeavor. Physicians are expected to act under the principle of beneficence, which obligates us to renounce any selfish interests for the good of the patients. Making a therapeutic decision on the basis of the fear of losing patient volume is a clear example of acting under a selfish interest, which could possibly have

catastrophic effects for the patient. Clinicians and hospital administrators may share different perspectives regarding ethical behavior toward the patients. Whereas the physician will never jeopardize the well-being of an individual, a hospital administrator may sacrifice the well-being of an individual for the well-being of a greater number of people. Although quality and safety of care are the predominant ethical interests of clinicians, these are only 2 of many competing values of administrators’ interests.²² In addition, hospital administrators may have a personal interest in the form of financial remuneration or bonuses for company performance. If boards judge company performance more by using financial metrics than by evaluating quality of care, then there is at least theoretic potential for administrators to be rewarded for running a company that disservices patients.²³

Clinical judgment is one of the tools in the arsenal we use to treat patients. This particular tool combines information gathered from patients with objective and subjective data. The vignette implies that, as a physician using her clinical judgment, Dr Streep feels that her preferred prosthetic heart valve results in lower gradients, better durability, and better long-term results for her patients. Going against her best clinical judgment to avoid patient volume loss, removal from the medical staff, or any other reason that does not concern the patient’s well-being, is unethical.

Physician-Hospital Collaboration

An effective and ethical approach to deal with the rising costs would be to work as a team developing proposals that would lower hospital costs without jeopardizing the quality of care. Proposals should be evaluated by all the team members involved in providing health care, so that a consensus can be achieved. In the case presented here, if the hospital administrative board had summoned Dr Streep and the other cardiac surgeons to discuss their proposal of using a specific prosthetic valve to lower costs, then Dr Streep would have had her opportunity to debate whether the change would be in the best interest of the patients. The hospital administration’s unilateral decision exerted economic pressure on Dr Streep to force her into using their preferred valve.

Montgomery and Schneller described in detail 2 strategies that hospitals are implementing to lower the costs generated by the purchase of PPIs.⁷ The formulary model involves limiting the number of products from which physicians can choose their PPI for a given procedure (for example, heart valves used in cardiac surgery). The second model is the payment cap model, which restricts the price paid for products used in a procedure. The formulary model obligates the hospitals to make a rigorous assessment of the products’ equivalency to avoid compromising patient safety. It also forces physicians to change their practice according to the available set of products. The payment

cap model allows the physician to perform his or her preferred practice. The hospital has the burden of negotiating price listings with the different manufacturers. Montgomery and Schneller⁷ indicated that good relationships among physicians, hospitals, and vendors is vital to make any strategy work. In the presented case, the hospital's administration clearly failed to establish any relationship whatsoever with Dr Streep in making a decision that deals with the health of patients who undergo aortic valve replacement.

The fact that Dr Streep believes that her choice of prosthetic aortic valve provides more durability, better gradients, and more benefit overall to patients is important. The hospital administration at St Helens did not establish equivalence between Dr Streep's choice and the device provided by the hospital's chosen manufacturer. Many factors can affect valve durability and patient outcomes. Patient-related factors are age, sex, renal function, and other comorbid diseases.^{24,25} Valve-related factors are composition, implantation technique (open vs transcatheter), and hemodynamic profile.^{26,27} It has been proved that there is significant variability in patient outcome depending on the choice of the prosthetic valve, obligating us to ask the following question: What if Dr Streep's choice does provide a better outcome for the patients? As previously stated, our obligation as physicians is to put the patient's well-being at the top of our priority list.

CONCLUDING REMARKS: ROBERT M. SADE, MD

Dr Streep's story illustrates a problem that has become all too familiar to hospital physicians: weighing medical professional judgment against hospitals' financial needs. Millikan and Trachiotis strongly agree on an important point: successful management of cost-control decisions in hospitals would benefit greatly from the respectful collaboration of administrators, physicians, and device companies. Many medical centers engage in such collaborative relations in developing economic strategies for the financial health of their institutions. In this vignette, however, the absence of an alliance between hospital administrators and cardiac surgeons led to Dr Streep's dilemma.

The central question of the debate, and the point on which the debaters most vehemently disagree, is the weight that should be placed on the surgeon's judgment when making financial decisions. The balancing will be done differently by administrators and surgeons, which is why collaboration is so important.

Millikan and Trachiotis agree that serving the patient's well-being is the paramount consideration, but they disagree vehemently on how to weigh that primary obligation against secondary interests, such as the hospital's financial stability and the surgeon's patient volume, practice

income, and reputation. Millikan simply accepts the physiologic near-equivalence of the hospital's preferred valve with Dr Streep's preferred valve, making it easy for him to conclude in favor of the hospital's view. Trachiotis, however, makes no assumption about the characteristics of the 2 valves—he believes that the surgeon should act on her own best judgment, apparently regardless of objective comparison of the valves or of what she stands to lose by resisting the hospital's request.

In the vignette, we are given no facts about the performance characteristics of the prostheses, nor are we given any indication of how strongly Dr Streep feels that her preferred valve is better than the alternative. Those 2 issues are critical in deciding how to advise her.

Holding the patient's well-being paramount is widely if not universally accepted as the first principle of medical ethics, but it is not absolute—it must be weighed against a host of other factors, and to do so requires a great deal of factual information. As in many ethical quandaries, good ethics starts with good facts, and in this case, we seem not to have enough of the latter. We can agree with Millikan and Trachiotis, however, that respectful collaboration between the hospital administration and the cardiac surgical staff, missing in this case, might have prevented Dr Streep's dilemma.

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