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PREOPERATIVE EVALUATION (BJ SWEITZER, SECTION EDITOR)

Defining and Ensuring Multidisciplinary High-Quality Patient-Centered Shared Decision-Making for Procedures: a Brief Review of the Current State

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Abstract

Purpose of Review Defining and ensuring the quality of surgical decision making is extremely complex. This manuscript will provide a review of current state in this evolving area and a conceptual framework to help clinicians understand how to approach this issue.

Recent Findings Recent reports support the hypothesis of the existence of significant decisional deficits. There are a number of factors identified that contribute to this: among these are lack of adequate metrics to define decisional quality, lack of training in this area for providers, and lack of compensation for the additional time it might take. A conceptual framework can assist the clinician having these discussions.

Summary The importance of decisional quality is increasingly being recognized. As we strive in the current health care environment to provide the right procedure for the right patient, ensuring the elimination of unnecessary and unwanted care that is not aligned with patient values and goals will become even more important. The constrained economics of health care and the increasing desire for patient advocacy, engagement, and high-quality communication with care givers lend support to this work.

Keywords Shared decision-making · Appropriateness · Informed consent · Patient-centered care · Patient engagement

Introduction

Understanding the current state of ensuring high-quality patient-centered shared decision-making for surgery and procedures is an essential part of not only ensuring alignment with patient values and goals but also may have the potential to eliminate futile and unwanted procedures. There are a number of reasons that this concept remains difficult to implement.

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Economic Implications

Recently, the Centers for Medicare and Medicaid finalized a proposal to reimburse providers for end-of-life counseling as part of advanced care planning (https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/Downloads/FAQ-Advance-Care-Planning.pdf. Accessed October 4, 2017). This was in response to a national push to further engage patients, families, and surrogates in their medical care decisions and improve overall access to these important services. In addition, CMS has announced a plan to reimburse participating ACOs for shared decision-making (SDM) services. Specifically, the "CMS Quality Strategy envisions health and care that is person-centered, provides incentives for the right outcomes, is sustainable, emphasizes coordinated care and shared decision-making, and relies on transparency of quality and cost information" (https://innovation.cms.gov/initiatives/Beneficiary-Engagement-SDM/. Accessed October 4th, 2017).

Hopefully, these recent developments will encourage more perioperative providers to have these often difficult conversations with some of their most medically complex surgical patients undergoing high-risk procedures. From an economic standpoint alone; failure to consider the importance of these discussions may negatively impact revenue and may become increasingly important in the future.

Appropriateness Models

More importantly, perioperative physicians have an important role in shaping the future of SDM—that is, helping the patient reach an optimal decision about their care that takes into consideration the latest research, available options, and the patient's own values and preferences. Better incorporation of patient preferences should lead to improved patient experience, greater levels of engagement, and less decisional conflict. In fact, a high-quality decision related to the appropriateness of care takes into consideration the best clinical evidence, qualified providers, an appropriate place to perform the procedure, and a well-informed patient.

Recent work by our group has shown that in the history of developing innovative models to ensure decisional quality, patient engagement has been lacking; and we have previously published a detailed discussion of each of these strategies [1•]. Models such as RAND/UCLA methodologies, internal peer review, external utilization review, payment incentives, and indications review are notably lacking patient engagement and input into the process. There is a notable absence of variables related to alignment of patient and provider goals, a measure of the extent of patient engagement in decision-making, and decisional quality. None of these approaches has become adopted in a widespread manner. Our thought is that it is not enough to merely ensure that the evidence shows that this procedure is the right procedure to treat a specific clinical condition, but that the procedure reflects concordance between surgical and patient values and goals. The potential impact on long term health care trajectories well beyond the arbitrary current 30 day metric needs to be assessed and discussed.

Conceptual Model of Shared Decision-Making

Therefore, we developed a conceptual model attempting to define the components of high-quality surgical decision-making (Fig. 1). We include four components. The first is that the procedure is the best surgical treatment for the patient's disease or disorder, based on the clinical evidence available. This decision lies entirely within the surgeon's area of expertise. However, this decision alone does not ensure high-quality SDM. The second and third components are generally a part of every surgical institution's infrastructure and ensure that by certification and privileging that the surgeon is the right provider and has the requisite skills to perform the procedure safely and that the institution has the appropriate infrastructure to support the level of care needed for that patient. For example, if cardiac surgery is being contemplated, having anesthesiologists available with expertise in this area will be important. If the patient has severe pulmonary hypertension, performing the procedure at an institution that has specialists in this area is critical. The multidisciplinary care team needs to be available and able to work together to generate an integrated perioperative plan. There is ongoing discussion in the literature of whether surgeons and institutions that perform low volumes of high-risk surgery have similar outcomes to those that do high volumes of such procedures, which we will not address here. In addition, the healthcare facility needs to have all necessary resources to ensure optimal outcomes. This may generally be reflected by things such as having Joint Commission accreditation, becoming a Center of Excellence in a particular area, and by having triage protocols that appropriately address which patients are suitable for surgical care in lower intensity environments such as outpatient surgery facilities or affiliate community hospitals, and which would benefit from the intensity of care provided by tertiary care institutions.

Finally, the fourth component, which is the one we believe is most often ignored, requires that the right patient is receiving this procedure that is the decision reflects the individual patient's values and preferences. To ensure that this occurs often requires multidisciplinary collaboration among surgeons, anesthesiologists and perhaps particular specialists involved in the patient's care. We frequently encounter patients in our preoperative clinic in which a global view by the surgeon of the surgical problem in the context of other significant comorbidities is not complete. The preoperative anesthesiologist with expertise in perioperative medicine can often provide a more complete risk assessment taking into account comorbidities that can significantly impact the risks, benefits, and safety of having the procedure. Expectations regarding perioperative pain and possible complication, postoperative disability, and post-discharge needs can be discussed with the anesthesiologist. These discussions can impact the care plan as well as the patient's understanding of the consequences of having the procedure. Once this broader patient-centered risk assessment has been done, we must ensure that there is a comprehensive discussion with the patient and family to help them understand the risk/benefit of the procedure in the context of all comorbidities, as well as the patient's values and goals. For high-risk or terminal patients, this discussion includes completion of a health care proxy, advanced care directives, and appropriate documentation in the record for downstream providers when critical decisions need to be made. If the patient has signed a do not resuscitate/do not intubate (DNR/DNI) request as part of their advanced

Fig. 1 Components of high-quality surgical decision making. The goal is to provide a methodological approach to define and improve appropriateness of surgical care with an emphasis on high-quality shared decision making. COE = center of excellence. From Cooper Z, Sayal P, Abbett SK, et al.: A conceptual framework for appropriateness in surgical care. Anesthesiology 2015;123:1450-145, with permission from Wolters Kluwer Health, Inc. Article accessible at http://anesthesiology.pubs.asahq.org/article.aspx?articleid=2467641

directives, a detailed discussion of what is acceptable perioperatively is mandatory. If all or parts of the DNR/DNI will be rescinded perioperatively, it is imperative to determine at what point postoperatively this order should be reinstated.

The anesthesiologist plays a key role in ensuring that the "right patient" is receiving the surgery, that a true risk assessment has been done, and that values and goals are aligned. This can be accomplished by directing and coordinating appropriate discussions among the surgeon, the anesthesiology team, the patient's specialists, and the patient. Ultimately, it is the patient, not the care providers, who makes decisions to proceed with surgery and anesthesia, and it is imperative that complete discussions of all issues have occurred.

Ensuring True Informed Consent

In the current environment, accepting a signed informed consent document as the only requirement that appropriate decision-making has occurred does not address all of the above issues, but at the current time would seem to be the only consistent way this is done. There is a template of language regarding discussion of risks and benefits but no requirement to ensure or document that this has actually occurred and that the patient has a good understanding of risks and benefits not just of the procedure itself but of the impact of the perioperative episode on other comorbidities. Again, there is a need to think beyond the arbitrary quality metric definitions such as "during the inpatient stay" or "within 30 days of the procedure." Certainly, it makes a difference whether there is no decline, an initial decline in health trajectory which recovers over time (months) and a decline which persists such that the patient does not return to the health baseline prior to performing surgery, resulting in a negative impact on overall quality of life.

In patients with severe or terminal illnesses contemplating surgery, a discussion of goals and values may be of even greater importance. Although the Joint Commission requires that patients be asked if they wish to complete a health care proxy or advanced directive, fulfilling the Joint Commission requirement requires only documentation that the patient was asked. Whether or not these were completed, whether a discussion occurred, and what was documented are not elements necessary to complete this requirement. It would seem we are compliant only with a process and not with the true meaning of ensuring that these discussions occur and that we have addressed the important perioperative issues. Previous work from our group using data from our institution showed that half of the patients scheduled for the ICU postoperatively were not aware of this, despite already having signed informed consent. In addition, half of those going to the ICU did not have a designated health care proxy or advanced directive [2•]. This is of particular importance because these patients may be unable to make decisions themselves due to

the effects of surgery and anesthesia. Of note, having designated a health care proxy is only part of what is needed; it is very important to stress to the patient that a conversation with the health care proxy should occur so that the proxy is well aware of the patient's wishes.

While clarifying code status and goals of care are essential components of anesthesia care and quality improvement, studies have found these discussions to be often insufficient [3]. An awareness of the long term trajectory of our elective preoperative patients is necessary. One study at our institution showed that nearly 5% of patients seen in a preoperative clinic at a tertiary care hospital died within 1 year of their procedure, yet almost half of those who died did not have an advance directive by the date of surgery [4]. Another study using our institutional data found that a significant number of preoperative patients showed deficits in their preoperative decision-making process [2•]. Specifically, after informed consent was signed with the surgeon, we identified decisional deficits such as patients being unable to identify their diagnosis or procedure, not knowing the risks and benefits of each treatment option or best choice for them, being unclear on which risks and benefits matter most to them, and lacking support and advice to make a choice. Deficits in advanced care planning (ACP) included not having a living will (39%) or a health care proxy form (54%) on file, not having discussed end of life wishes with anyone (26%), and wanting to talk more about ACP (29%).

Recently, both the American Society of Anesthesiologists and the American College of Surgeons (ACS) re-issued statements on ethical management of DNR/DNI documents, advocating discussion, documentation, and clarification of postoperative care based on patient's goals and values. This should also be reflected in additional training for anesthesia trainees and a creation of effective educational resources [5]. However, there is currently no specific guideline in the anesthesia residency curriculum to ensure that these areas are appropriately taught and that residents demonstrate proficiency in these areas. Currently, we are conducting a prospective, randomized-controlled study funded by the Foundation for Anesthesia Education and Research (FAER) to create a model curriculum for anesthesia residents in SDM using a simulated patient encounter. We hope that once completed, our study will demonstrate the effectiveness of a novel educational intervention that can also be used by residents in other specialties.

Metrics

One challenge is judging when SDM has successfully occurred. There is a need to develop a set of reliable metrics and decision outcomes that actually measure the adequacy of SDM process. There is increasing interest in research in this area. These metrics have a potential to become recognized quality outcomes once tested for validity, reliability, and generalizability. In fact, high-level decisional quality is an important indicator of patient-centered care and an outcome relevant for surgical decision-making.

Risk Factors for Poor Decisions

Surgeons and anesthesiologists can learn to identify risk factors for poor decision-making, such as lower socioeconomic status, limited literacy levels, severe or terminal illness that may influence patient values and goals, high frailty scores, and cognitive deficits. This offers clinicians a unique opportunity to participate in the appropriateness of care decisions in the era of value-based care. [6]

Identifying patients at high-risk for deficits in decisional quality will allow us to develop and target resources to these vulnerable populations. An area of particular concern is how to evaluate decisional quality in patients who stratify abnormally on preoperative cognitive exams. Preoperative cognitive stratification has not been a routine part of presurgical assessment, despite the known potential impact of anesthesia and surgery on postoperative cognitive function. Both the ACS and the American Geriatric Society have released statements supporting the performance of routine preoperative cognitive screening. Recent work from our group has demonstrated a significant number of patients without a known diagnosis of dementia or cognitive disorder who stratify abnormally on a routine cognitive screen, with an overall incidence of 23% meeting criteria for probable cognitive impairment [7]. This raises the concern of the ability of this group of patients to adequately understand the decision-making conversation so that they have an appropriate understanding of risk, benefit, and postoperative impacts. This is currently an important topic for future research.

Conclusion

Future directions include designing, testing, and implementing new models of high-quality SDM, creating conversation toolkits for providers and decision aids for patients. Research to better understand the patient's and provider's perspectives, obstacles to implementing decision-making processes, and the impact of SDM on perioperative outcomes is needed.

Compliance with Ethical Standards

Conflict of Interest Angela M. Bader declares that she has no conflict of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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