VIEWPOINT

Innovations in Surgical Communication 2—Focus on the Goals of Surgery

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When starting an operation, you might ask the student or resident "Why are we doing this?"

They will respond confidently, "Because the ankle brachial index is 0.3."

Ask again, "Why are we doing this?"

Again, a confident response, "There is a nonhealing ulcer."

Once more, "Why are we doing this?"

"There is a blockage in the superficial femoral artery."

You may need to ask "Why are we doing this?" multiple times to hear we are doing this to prevent limb loss or reduce the patient's pain. This is not the trainee's fault. Rather, it reflects how we talk to patients about surgery. We identify problems; our objective is to fix them.

Presumably, surgeons perceive the connection between how surgery will help a patient and addressing an abnormality. But when we talk to patients about surgery, we seldom state explicitly what surgery might accomplish for them. Surgery can do only 4 things for patients: it can help them live longer, feel better, prevent disability, or obtain a diagnosis. In our study[1] of surgeons discussing major procedures with older adults, we found surgeons rarely mention even 1 of these goals. No goal is discussed in half the consultations. In one-quarter of consultations, the stated goal is to cure or control cancer. While curing and controlling cancer sound appealing, these are means to the end goal of helping patients live longer and/or feel better. Surgeons highlight the technical results of surgery and obscure the primary reason to achieve these results. We talk like what matters is addressing the problem, when what matters is whether surgery can improve the patient's life.

Rather than anchoring surgery to a clear goal, most surgeons describe surgery as an intervention designed to fix a problem. Some say, "This operation will fix it." Others use less direct language, eg, repair or replace, but convey the same meaning: an anatomical correction matched to the patient's problem.[2] These results are not confined to 1 study.[1-3] We all do it. Surgeons devote about half their consultation to describing an isolated problem and the operation to fix it. We show images of tumors and talk about removing them. We show angiograms and describe constructing a bypass around the occlusion. We can take out the esophagus and replace it with the stomach and if the aortic valve is too tight, we can loosen or replace it.

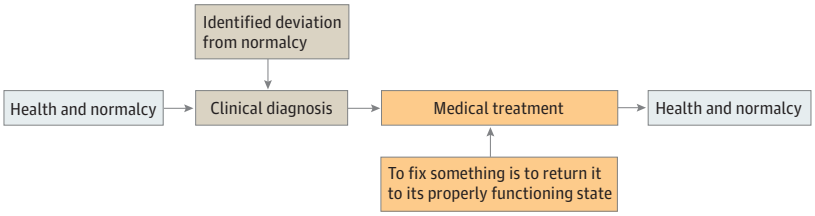
It is tempting to imagine the body as a sum of its parts. When we address an isolated issue, we can offer a direct solution, much like replacing a malfunctioning part in a car. While this imagery might represent treatment for a femur fracture in a healthy young person, or even appendicitis, fix-it language overstates the mechanical nature of illness and belies the complexities of operating on a human. Critically, the model promotes what we can do technically while failing to consider whether addressing the problem will generate a valuable outcome for patients.[4]

When we do not specify how surgery will help a patient, patients discern their own goals. A 2001 study[5] interviewed patients after meeting with a surgeon while awaiting carotid endarterectomy. Investigators asked patients to describe the risks of surgery and patients appropriately noted the possibility of perioperative stroke. They also asked patients to state the benefits of surgery. While patients correctly reported the goal of surgery was to prevent stroke, they also believed their memory, weakness, or shortness of breath would improve. It is not hard to imagine how these patients were confused. Surgeons had explained there was a narrowing in their artery and surgery would fix it. Because patients were not told that the only reason to have surgery was to prevent stroke, they attached their own (implausible) goals to this anatomical correction.

Failure to clearly state the goals of surgery and use of fix-it language creates multiple hazards for patients and families—not the least is disappointment when their presumed implausible goals are unmet. We have seen patients both decline surgery when it was the best option to achieve their desire for life prolongation and push to have surgery when it was unlikely to achieve their goals. We find surgeons accentuate perioperative risk when they feel an operation is not in the patient's best interest, for example, an older adult with life-limiting comorbidities and an asymptomatic aneurysm. Like discussions about cardiopulmonary resuscitation and the fear of breaking ribs, we upsell the harms of surgery rather than expressing concern that surgery will not meet the patient's goals. Even under high-risk circumstances, this strategy is unlikely to deter patients and families. Not surprising when the conversation started with a characterization of their problem, eg, an aneurysm, and followed with a description of surgery as the solution to the problem.

To do better, we can start our conversations with a clear statement of what surgery might accomplish for the patient. We might say, the reason to consider surgery is to help you live longer (or feel better, etc). Likewise, we should clarify what surgery will not do. This is an opportunity to set expectations about how much longer surgery could extend their life, or how much better they might feel. When operating for asymptomatic disease, we need to acknowledge that surgery will not make them feel better. Another strategy is to ask, "What are you hoping surgery might do for you?" Because the fix-it model of health care is common among patients (**Figure**),

Figure. The Fix-It Model of Health Care



The fix-it model of health care posits that health requires absence of abnormality and illness is an identified deviation from normalcy. As such, health care is designed to address deviations and restore patients to normalcy. While this model may reflect some patient experiences, it fails to account for how medical intervention will impact patients' lives.

surgeons will need to address these assumptions and create a new outlook about how surgery might benefit them.[6]

Clarity about the goals of surgery will help us talk about whether surgery is worth it given the potential and limits of what surgery can do for patients. A description of the goal(s) of surgery will provide a platform for deliberation between what we are trying to accomplish and what they are willing to tolerate or give up. With well-defined statements about the goals of surgery and avoidance of fix-it language, we can be sure everyone—patients, families, surgeons, and trainees—knows why we are doing this operation.

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REFERENCES

1. Stalter LN, Baggett ND, Hanlon BM, et al. Identifying patterns in preoperative communication about high-risk surgical intervention: a secondary analysis of a randomized clinical trial. *Med Decis Making*. 2023;43(4):487-497. doi:10.1177/0272989X231164142

2. Kruser JM, Pecanac KE, Brasel KJ, et al. "And I think that we can fix it": mental models used in high-risk surgical decision making. *Ann Surg*. 2015;261(4):678-684. doi:10.1097/SLA.0000000000000714

3. Taylor LJ, Nabozny MJ, Steffens NM, et al. Best case/worst case: a framework to improve surgeon communication in high-stakes surgical decisions. *JAMA Surg*. 2017;152(6):531-538. doi:10.1001/jamasurg.2016.5674

4. Neuman MD. Surgeons' decisions and the financial and human costs of medical care. *N Engl J Med*. 2010;363(25):2382-2383. doi:10.1056/NEJMp1009621

5. Lloyd A, Hayes P, Bell PR, Naylor AR. The role of risk and benefit perception in informed consent for surgery. *Med Decis Making*. 2001;21(2):141-149. doi:10.1177/0272989X0102100207

6. Lynn J, DeGrazia D. An outcomes model of medical decision making. *Theor Med*. 1991;12(4):325-343. doi:10.1007/BF00489892