VIEWPOINT

The Perioperative Surgical Home
Cui Bono?

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In recent years, attention has been directed to the concept of the Perioperative Surgical Home (PSH). The origin of this concept can be attributed to the introduction of ambulatory surgery and the rise of preadmission testing centers, which led to improvements in the preoperative recognition and management of risk factors and a reduction in the use of preoperative screening services and tests that provided no clear benefits.[1] Beginning in the 1990s, a number of institutions began to formally address the problem of a perioperative system of anesthetic management for nonurgent procedures, viewing it through the Donabedian lens of quality[2] that focuses attention on structure, process, and measurement of outcomes. Most recently, it has been recognized that outcomes of major elective operations can improve with the proactive, goal-directed, preoperative preparation of the patient coupled with early planning for discharge and postprocedure rehabilitation.[3,4] The PSH is a vehicle for integrating preoperative, intraoperative, and postoperative phases of care on the theory that the highest value will be achieved for the patient and the payer. But it seems fair to ask, who actually will benefit?

As proposed by the American Society of Anesthesiologists,[5] a PSH has 3 appealing qualities: first, it would share decision making among specialties; second, it would include the patient as an equal stakeholder and be centered on optimizing the patient's experience; third, it would be structured to foster ongoing communication and coordination of surgical and anesthesia care. Impediments to the successful achievement of these goals include the realities of care for individual surgical patients and the surgical problems that they may encounter. Each patient may have individual requirements that influence the preoperative preparation for the general risks of the operation and anesthesia, and each type of surgical problem may require specialized programs of preoperative preparation and postoperative rehabilitation.

The evolving literature emphasizes the value that may be expected from a PSH and on which its sustainability should be judged. Relevant here is Porter's general analysis of value in health care.[6] His formulation that value is defined as outcomes relative to costs underscores the idea that value and costs ought to be coupled to the full cycle of care for the patient's medical condition, not the costs of individual services. Porter[6] has also noted the potential for conflicts in the perception of value by the different stakeholders, which can lead, he believes, to the wrong kinds of competition and to less value for intended beneficiaries. Several insights follow, the most important of which is that the proposed treatment plan should have as its fundamental goals that health status will be restored as quickly as possible and sustained as long as possible. A second insight is that a profile of metrics is needed to fully understand the value of the cycle of care to patients and payers, including clinical outcomes, the efficiency of resource utilization, and the costs connected to each phase of care. One last insight is that optimizing value in the cycle of care requires that no one component be allowed to disproportionately influence the allocation of resources.

Ideally, a PSH should oversee and integrate prehabilitation and rehabilitation programs with perioperative care. A PSH adds value by taking responsibility for the cycle of care that starts at the time when it is recognized that surgery may be indicated and is completed when the patient has recovered as well as can be expected. Meeting this responsibility requires that a PSH oversee and integrate the institutional resources and efforts of the health care groups involved in the cycle of surgical care. Moreover, a PSH should be able to adapt the allocation of the system's resources specifically to address the needs of the patient who is medically complex or has unusual requirements for anesthesia resources. Such patients benefitting from a PSH structure would include those with advanced disease and its complications and, perhaps, the patient who requires semiurgent surgery and rapid mobilization of resources before reaching the inpatient setting. A critical consideration is that a PSH should add value to existing alternatives, and to do this, the PSH must be able to connect to larger programs throughout the health care system that exist to "restore and sustain" health[6] generally and not just as a means to improving outcomes that may be attached to specific operations.

Porter[6] provides a framework for comparing alternative models of perioperative systems within the cycle of care for a patient with a surgical problem. The spectrum of alternatives includes the traditional, preadmission testing center of a general hospital, which focuses on optimizing the use of preoperative testing procedures for optimizing risk assessment and intervention, as well as efficient use of the operating room and its resources.[3] Another alternative is the concept of the service line, sometimes housed in a separate facility, using multidisciplinary expertise and requiring unique and shareable resources to address a recognizable grouping of clinical problems such as cancers, cardiovascular diseases, or neurologic disorders. A third set of alternatives include enhanced recovery pathways that focus closely aligned groups of surgical problems (ie, colorectal operations, joint replacements, or bariatric procedures). Enhanced postoperative recovery pathways have been shown to work well for elective procedures in which the patients are likely to be similar in their require-

ments for risk assessment and for which hospitalizations are likely to be brief and the time frame for convalescence highly predictable.[4]

It seems fair to point out that any of these models would tend to divert the allocation of resources. A freestanding preadmission testing center would tend to neglect extended preoperative programs of preparation and pay little attention to rehabilitation and postdischarge planning. The enhanced recovery model has a tendency to focus energy and attention on patients who are at low or intermediate risk, but may not be able to plan for managing unique preoperative risk factors or special requirements for discharge or rehabilitation pathways. A service line will tend to focus on the acquisition of resources exclusively for its disease targets, and its resources are not easily adapted for managing unique comorbidities, unusual requirements of anesthesia, or life-threatening complications of surgery.

The PSH could be an idea whose time has come, with its emphasis on shared responsibility and decision making, patient-centered behaviors, and recognition that variability in surgical outcomes can be improved by the coordinated multidisciplinary management of medical complexity and postoperative rehabilitation. In our view, it is not to be implemented for all patients, and it should not take the place of systems that already provide the safe and efficient management of medically uncomplicated patients undergoing procedures having a low or intermediate level of complexity. For a PSH to add value beyond currently available and evolving alternative systems of perioperative care, there must be a clear definition of the patient cohorts that it will serve and the metrics of performance and value that will take into account the medical and surgical complexities encountered throughout all phases in the cycle of care. In addition, concerns related to organization, finance, and leadership have to be resolved locally. Recent statements from the leadership of the American College of Surgeons[7] have emphasized that surgeon-leaders cannot be excluded in the effort to create a PSH that adds value. The critical element of success, however, will be the structures and incentives that foster an ongoing dialogue and a collaborative, value-conscious approach between institutional managers, program leaders, health care teams, and the patients themselves.

ARTICLE INFORMATION

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