The Perioperative or Surgical Home

An emerging draft proposal for pilot innovation demonstration projects (May 2011)

American Society of Anesthesiologists (ASA)

Issue

To date there is no coordinated and widely-adopted construct to improve quality of care and outcomes while ensuring patient safety and achieving cost savings across the widest possible range of surgical interventions. Why would this be important? Surgical care is associated with approximately 65% of all hospital expenses, and literally thousands of patients in the U.S. suffer complications, including death, during the perioperative period annually. Pulmonary thromboembolism, wound infections, opioid-associated respiratory depression, and other potentially devastating complications need coordinated management across the entire surgical episode of care to reduce their frequency, severity, and expense. For example, a simple postoperative pneumonia is estimated to cost health care systems $27,000; complex pneumonias after surgery can be associated with extraordinary expense, severe disability or death.

Anesthesiologists are perfectly positioned to coordinate and manage the full spectrum of surgical episodes, reduce costly complications, and improve efficiency of care.

Anesthesiologists have been universally recognized by the Institute of Medicine and others as the leaders in patient safety. They have the training, skills, and perspectives that allow them to coordinate and manage the perioperative care of patients by assisting surgeons and proceduralists, as well as hospital administrators and ancillary personnel, in achieving the shared vision of coordinated care with reduced complications and expenses. The recently announced “Partnership for Patients” by the American Association of Medical Colleges and other initiatives present multiple opportunities to advance innovative ideas to meet multiple shared goals.

This demonstration will evaluate whether anesthesiologists, when supported by Medicare, Medicaid and private health plans will be able to:

- Reduce unjustified variation in utilization and expenditures;
- Improve the safety, effectiveness, timeliness, and efficiency of health care;
- Increase the ability of beneficiaries to participate in decisions concerning their care;
- Provide delivery of care that is consistent with evidence-based guidelines in historically underserved areas; and
- Decrease unjustified variation in utilization and expenditures under the Medicare program.

Problem

Medical care coordination is frequently lacking or not fully developed. Thus, many groups are evaluating the efficacy and cost-effectiveness of “medical homes” and other coordination efforts. Similar coordination efforts are missing along the surgical continuum of pre-, intra- and post-operative care. Emerging or existing patient outcome registries represent significant steps in the right direction to advance optimal technical surgical outcomes, but larger issues associated with inefficient perioperative care and expensive postoperative complications are not being comprehensively addressed currently by our health care system. This deficiency results in...
increased hospital re-admissions, hospital-acquired conditions and added costs, all of which put unnecessary strain on scarce health resources and can lead to protracted patient illness, disability, and even death.

Congressional Request – Support ASA’s draft proposal for innovative Perioperative or Surgical Home demonstration projects with Medicare.

The perioperative or “surgical home” is a new concept and reflects the great potential that coordination and management of surgical patients have to reduce complications and improve efficiencies and cost-effectiveness of perioperative care. The role of anesthesiologists as peroperative physicians is evolving. Because anesthesiologists care for patients with a variety of co-morbid conditions from admission to discharge, they are uniquely suited to help healthcare organizations improve the quality of care that patients receive. They play a key role to improving surgical care because the perioperative period is too frequently fraught with significant morbidity and mortality brought on by errors, expenses and inefficiencies associated with poor coordination of care, and suboptimal patient satisfaction.

The surgical home concept would more actively integrate anesthesiologists into the patient continuum by increasing their involvement in all parts of the perioperative period, including pre-operative assessment, intra-operative stabilization and safeguarding of all body systems and vital organs, and post-operative optimization and pain relief. By coordinating the services provided by other health care professionals in the perioperative period, the anesthesiologist also would improve communication and address system issues that frequently contribute to suboptimal outcomes.

To achieve the success of the surgical home a variety of steps may be required. The following list is not exhaustive:

- Currently, non-anesthesiologist physicians and nurses frequently evaluate patients shortly before surgery and determine which tests are needed. Within the surgical home concept, surgeons, internists and family practitioners, either inpatient or outpatient, would contact the anesthesiologist to assess patients earlier in the process. This change in practice would allow unnecessary tests to be avoided and test results that the anesthesiologist finds necessary could be available in time to avoid costly and inefficient surgical delays. We believe that the U.S. health care system would recognize significant cost savings as a result of avoiding unnecessary or duplicative tests. (Reduce unjustified variation in utilization and expenditures).

- Earlier contacts with patients, soon after decisions to operate, would allow different anesthetic and postoperative management options to be discussed and explained. These interactions would allow greater time for educating patients on what to expect during the perioperative period. These preoperative discussions might include details regarding intraoperative monitoring, types of surgical anesthesia, modes of vascular access and postoperative pain control, and expectations for postoperative recovery and eventually discharge. In addition to empowering the patient and increasing patient satisfaction, these steps would allow operating room personnel to better plan, thus improving operating room efficiency. (Increase ability of beneficiaries to participate in decisions concerning their care).
As a basic construct of the surgical home concept, primary care providers, anesthesiologists, and other members of the medical and surgical team would work to improve communication and better address any potential complications or patient concerns and provide for efficient and effective transfers of care between all health care settings. (Reduce unjustified variation in utilization and expenditures under the Medicare program.)

Anesthesiologists would become more involved in the development of hospital protocols and systems that positively impact perioperative management. This would include the development of transfusion and anticoagulation guidelines, new strategies to ensure timely administration and re-administration of antibiotics, and education of other physicians or nursing staff on a variety of issues, including pain management, that frequently contribute to prolonged hospitalization. (Improve the safety, effectiveness, timeliness, and efficiency of health care.)

Others areas ripe for systematic re-tooling under the surgical home concept include fluid resuscitation protocols in various locations within the hospital; development of cardiopulmonary resuscitation protocols and the availability of essential airway management equipment and skills throughout the hospital; development of rapid response teams; and efficient and cost-effective preoperative testing (i.e. echocardiograms, pulmonary function tests, etc.) that decrease patient delays and expense. (Reduce unjustified variation in utilization and expenditures under the Medicare program.)

Postoperatively the surgical home concept would lead to coordination and oversight of a variety of functions that improve outcomes and curb postoperative pain, morbidity and mortality. Such steps would range from simple patient education to more involved steps such as improving coordination among anesthesiology departments, surgeons and operating room personnel. For example, postoperative pain management techniques and protocols for orthopedic patients can result in improved analgesia, earlier ambulation, reduced respiratory and thrombic complications, and more cost-effective care. Coordinated postoperative management has been shown to be effective in removal of unneeded invasive devices such as intravascular catheters and endotracheal tubes before they lead to infection. In general, improved coordination of postoperative care can reduce complications, reduce costs, and lead to earlier discharges. (Improve the safety, effectiveness, timeliness, and efficiency of health care.)

By taking steps to oversee surgical homes, anesthesiologists can help hospitals and other healthcare organizations meet the aims and priorities of the National Quality Strategy and other recent calls for innovation and positive change. By expanding the role of anesthesiologists, the surgical home concept also would help healthcare entities earn additional funds made available through the new Partnership for Patients initiative.

The case for the surgical home concept is not theoretical. Leading institutions have documented savings and improved outcomes with the introduction of surgical homes. This concept now needs to be tested in a wider set of demonstration sites. For example, the March 2011 issue of Anesthesiology News documents the tremendous success of Mayo Clinic, in Rochester, Minnesota, where, “Mayo anesthesiologists have spearheaded a system-wide effort to reduce blood transfusions through a ‘continuous oversight program’ for the operating room.” Initially only extended to cardiac surgery, “the program reduced the number of transfused blood products
by half, while reducing infection risks and the incidence of renal dysfunction.” “This resulted in
millions of dollars in savings to the institution in the first year.” Other savings have been found
at Mayo where anesthesiologists have identified patients at high risk for developing
complications related to obstructive sleep apnea. Similarly, a switch to cheaper local anesthetics
trimmed the University of Pittsburgh’s medical drug budget by $1 million.

All in all, the experience of Mayo Clinic and other leading medical centers appears translatable
to institutions of varying scale. As per ASA President Mark A. Warner, M.D., who is Dean of
Mayo School of Graduate Medical Education, “If anesthesiologists’ efforts reduce length of
stays, number of transfusions and the complications that accompany them, and improve patient
satisfaction and safety, it is logical that medical center and facility administrators will find value
in this extension of anesthesia practice.” To this end, extending these various surgical home
innovations to Medicare would help stabilize costs while improving the cost-effectiveness and
efficiency of patient care and outcomes.