

The Presurgical Episode: An Untapped Opportunity to Improve Value

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Although efforts to improve value in surgical care have focused on inpatient and postoperative care, services provided prior to surgery have largely been ignored. Given that ambulatory care accounts for the greatest utilization of healthcare expenditures as a whole,^{1,2} critical examination of care delivered prior to surgery, starting when a patient first seeks care for a problem, is an untapped opportunity to improve healthcare value. Clinicians typically practice in silos with no incentives to improve the coordination and efficiency of services that patients receive prior to undergoing a procedure. Therefore, we propose a new approach to assess and improve the quality and efficiency of presurgical care.

Major overuse and underuse problems can occur during presurgical care, even for a straightforward and common musculoskeletal condition such as carpal tunnel syndrome. Care coordination problems and delays can easily arise from multiple clinicians being involved, not just from primary care provider discontinuity, but also from poor coordination or inconsistent approaches among clinicians from occupational therapy, surgery, physical medicine and rehabilitation, and pain management disciplines. Patients with less severe symptoms can often benefit from nonoperative treatments, but in patients with severe disease, such treatments can waste money, delay symptom relief, and needlessly risk complications (including irreversible nerve damage). These problems can also be seen in other conditions that can lead to surgery, such as spinal disease and joint osteoarthritis, in which there are no incentives for multiple clinicians to work together to provide well-coordinated and efficient preprocedural care.

A healthcare strategy that encourages improvements in efficiency and value is “bundling” services within an episode of care. When combined with quality measurement and clinical care pathways, episode-based frameworks can, in theory, encourage clinicians to manage resources wisely and minimize low-value care.^{3,4} Although CMS canceled its plan for mandatory bundled payments for cardiac surgery, the leadership at CMS still believes that episode-based initiatives show promise to improve care coordination and quality while reducing healthcare spending and anticipates further expansion of voluntary bundled payment programs in the future.⁵

To date, however, these efforts to improve the coordination and value of surgical care have focused on just a few conditions and have only captured surgical, acute, and posthospitalization care.^{6,7} Although the National Quality Forum Episodes of Care Measurement Framework defines the start of a clinical episode as the time of initial evaluation and management for a condition,³ to our knowledge, no episode-based evaluation approach has included presurgical care more broadly, nor incentives to promote appropriate and efficient care in the period between a patient’s initial encounter and a procedure. The systematic evaluation of the full spectrum of preprocedural care is needed to fully address the problem of low-value surgical care.

The first step we propose is to develop measurement tools and greater practical guidance for clinicians involved in the delivery of presurgical care. We suggest first expanding episode models to assess the quality and degree of resource utilization delivered across the totality of preprocedural care. For each episode that results in a surgery or procedure, the measures would start with the initial clinical encounter within a specified time period prior to the surgery and include visits, tests, and nonoperative treatments delivered prior to surgery.

The next step is to use these measures to examine how clinical or organizational factors are associated with variation in quality and resource utilization, with the goal of developing guidelines and strategies that improve the efficiency of presurgical care and, ultimately, patient outcomes. Understanding modifiable organizational and clinical processes associated with efficient and well-coordinated presurgical care can help to inform the creation of high-value presurgical care pathways.

The proposed presurgical episode model can be applied to assess quality and utilization measures for care delivered prior to surgery for patients with carpal tunnel syndrome in our example clinical scenario. Evidence suggests that preoperative testing rarely affects treatment decisions for this condition,^{8,9} and current policies (and clinical practice guidelines) rarely consider symptom duration or severity in guiding the appropriate use or timing of tests and nonoperative treatments.⁵ Consider the case of a patient who presents with clinically severe carpal tunnel syndrome and is prescribed

TAKEAWAY POINTS

- ▶ Healthcare reforms to improve value in surgical care have focused solely on inpatient and postoperative care while ignoring the value and efficiency of services provided prior to surgery.
- ▶ Evaluation of care provided during the presurgical period cannot be ignored if we are to comprehensively tackle the problem of low-value care.
- ▶ The expansion of episode-based measurement models of quality and efficiency, to begin with a patient's initial visit for a surgical problem, has the potential to facilitate improved care coordination and value.

splints and a series of steroid injections for an inappropriately prolonged period of time before being referred for carpal tunnel release. Given the severity of symptoms, the treatments prior to surgery represent low-value presurgical care because they are unlikely to provide long-term benefit and may lead to worse patient outcomes by delaying more appropriate treatment.¹⁰

In this example, a presurgical measure of quality could assess inappropriate delay of surgery in patients with recurrent or persistent symptoms. A measure of resource utilization would include the number of presurgical encounters for treatment of the condition or total costs of care. Understanding the relationships among these proposed presurgical measures and clinical factors, such as the use and duration of nonoperative treatments or electrodiagnostic testing, can help identify best practices in presurgical care that will promote more efficient symptom relief and minimize patient inconvenience and added costs related to low-value tests and treatments.

This proposed measurement model of presurgical quality and utilization could be applied across a spectrum of surgical conditions to assess and improve the value of presurgical ambulatory care. Once these measures are developed and processes for improving preprocedural care are understood, health systems and professional societies can better promote the delivery of efficient presurgical care across providers through the development of high-value clinical care pathways. In addition, the presurgical measures could eventually be included in existing procedure-based episode-of-care models to provide incentives to promote shared accountability for the totality of surgical care that patients receive within and across health systems.

One potential challenge in developing these presurgical episode measures and high-value care pathways is the tailoring that will be required for each clinical problem and each health system. The duration, visits, and tests included in a presurgical episode will vary by condition. For low-risk surgery such as cataract care, the number and type of potentially unnecessary tests or visits prior to surgery would likely be defined by a presurgical episode of relatively short duration. For carpal tunnel syndrome or major joint arthritis, on the other hand, the duration of the episode examined would likely be much longer. In the initial phase of creating presurgical episode models, measurement evaluation could be triggered by delivery of a surgical procedure, with retrospective evaluation of care delivered during a defined period of time before surgery, as far back as the patient's first clinical encounter. Once episode models are defined, health systems can also assess measures prospectively, triggered

by the patient's initial clinical encounter for a given problem. In this case, even patients who are successfully treated nonoperatively may be included in the measurement models and should also benefit from efforts to improve the coordination and value of presurgical care.

Despite these complexities, attention to care delivery during the presurgical period cannot be ignored if we are to comprehensively tackle the problem of low-value care. The expansion

of episode-based approaches, to begin with a patient's initial visit for a surgical problem, has the potential to facilitate improved care coordination. Creation of clinical care pathways and episode-based measures that capture and guide delivery of presurgical care will promote shared responsibility across clinicians for providing efficient and high-value care. ■

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