Starting in the office to improve postop outcomes

OR teams are accustomed to using checklists to keep patients safe during surgery. Could extending presurgical checklists to the physician’s office or clinic produce even better results?

The new Strong for Surgery initiative in Washington State is introducing checklists into offices and clinics to help address issues like nutrition, glycemic control, and medication management. The aim is to help ward off complications even before patients arrive at the hospital or surgery center.

Strong for Surgery seeks to standardize evidence-based practices in 4 areas for patients having elective surgery:

- nutritional status
- blood sugar control
- optimizing medications
- smoking cessation.

Free tools, including checklists and an implementation guide, are at www.becertain.org/strong_for_surgery/hospitals. The website has special sections for providers and patients.

“Surgical preparedness is becoming part of the basic conversation about planning for surgery, and the patient shares in the process,” says Thomas Varghese, Jr, MD, MS, Strong for Surgery’s medical director.

“If we shift the spotlight to when we first engage with patients in the clinic, then we have an opportunity to get better outcomes.”

Roots of the project

Strong for Surgery is a program of CERTAIN, the state’s learning system for health care, which partners with the Surgical Care Outcomes Assessment Program, or SCOAP, a voluntary quality improvement program that targets care such as timely antibiotic administration, patient warming, venous thromboembolism prevention, and others.

Strong for Surgery, piloted at 5 hospitals, is rolling out to all 55 of Washington State’s hospitals using the same learning network developed for SCOAP.

Members of the Strong for Surgery team work with offices and clinics on an implementation plan appropriate for each clinic’s culture and workflow.

Benefits for hospitals

The program promises to benefit hospitals and surgery centers by contributing to better postoperative results, Dr Varghese notes. That becomes more important as facilities are measured on quality and begin to see reimbursement affected by their performance.

“Our patients are getting sicker, and we are serving an older population,” he says. “If we don’t take advantage of the opportunity to see if there’s anything we can do to improve patients’ outcomes before they come to the hospital, we’re at the mercy of whatever situations come through the door.”
Though the program is aimed at care for elective patients, Dr Varghese thinks it can also carry over to emergencies. As clinicians become familiar with the Strong for Surgery checklists, he notes, they will be more aware of issues like malnutrition.

“Ideally, you would want to optimize their nutritional status,” he notes. But with an urgent patient, “we can at least alert the inpatient team, including nurses and dietitians, of the patient’s nutritional status. We think this earlier notification will benefit all patients.”

Here’s a look at the 4 Strong for Surgery areas:

**Nutrition**
Nutritional status is the single most important independent predictor of outcome for any type of surgery, evidence shows. SCOAP’s data indicates that patients with an albumin level of <3.0 g/dL have a two- to three-fold increase in rates of reoperation and/or death.

The Strong for Surgery checklist addresses 3 areas:
- screening for malnutrition
- lab tests for albumin level to stratify risk
- screening for use of nutritional supplements.

**Glycemic control**
Blood glucose control for diabetic patients having surgery reduces the risk of surgical site infections and promotes healing.

As many as one-third of surgical patients have undiagnosed diabetes. Checking blood glucose before surgery may identify these patients so steps can be taken to control blood glucose levels before surgery.

The Strong for Surgery checklist has guidelines for blood glucose screening and management.

**Smoking cessation**
Smoking increases the incidence of pulmonary complications after anesthesia by as much as 6 times, studies have found. Smoking is an independent risk factor for complications ranging from lung function disorders to impaired wound healing and cardiovascular events.

The Strong for Surgery checklist serves as a guide for risk stratification and provides resources for encouraging patients to quit smoking.

**Medication management**
A thorough review of all medications, over-the-counter drugs, and supplements is important so patients can be advised which medications to continue and which to stop before surgery.

The checklist includes items related to bleeding risks, beta-blockers, and aspirin for cardiac protection.

**Seeking collaboration**
Dr Varghese says he and his team are interested in working with and learning from others around the country who are also seeking to improve surgical outcomes.

“As we roll this out in Washington, our goal is to collaborate with national partners as well,” he says.
Strong for Surgery is funded by grants from the Agency for Healthcare Research and Quality, the state’s Life Science Discovery Fund, and the Nestle Health Care Institute for the building of its quality improvement platform, which does not promote commercial products.

Learn more about Strong for Surgery at www.strongforsurgery.org.