Electronic tool aids in navigating preop process

Preop “nurse navigators” aided by an electronic tool are helping a Pennsylvania health system create a more standardized, user-friendly preoperative process for preparing patients for surgery. A cornerstone of the process is evidence-based guidelines for preop evaluation developed by a 50-person task force.

“We wanted to optimize our approach so that when a patient comes to us, we could ensure a consistent standard of care that is evidence based,” says Stephanie McKoin, BSN, MPAHSA, RN, NEA-BC, clinical director of surgical services for York Hospital/WellSpan Health. The York, Pennsylvania-based system has 5 surgical sites, including York Hospital, Gettysburg Hospital, a new surgical-rehab hospital, and 2 ambulatory surgery centers. The total surgical volume is about 33,000 procedures.

The project, underway for 3 to 4 years and led by a task force of the Surgical Care Clinical Effectiveness Team, has involved surgeons, anesthesia providers, intensivists, cardiologists, internal medicine and family practice physicians, senior leaders, the medical director of surgical services, perioperative nursing leaders, and nursing staff.

“We like to have everyone at the table,” notes McKoin, explaining the task force’s large size. “The process was participative and challenging.”

The WellSpan guidelines, finalized in 2010, are based on published recommendations from the American College of Cardiology/American Heart Association and the American Society of Anesthesiologists, among others. (See resources.)

The guidelines were disseminated to the surgeons’ offices and the 2 anesthesiology groups. But the effort didn’t stop there.

Living the guidelines

The leaders knew they needed a plan to ensure the new guidelines became part of daily practice. “We have a great document, but how do we live that and make it user friendly?” says McKoin.

The plan, now in a pilot with a neurosurgeon’s practice, is to have preop assessment nurses act as “navigators” to guide patients and surgeons’ offices through preop preparation.

“Once the decision is made for surgery, our nurses call the patient,” she explains. “In the pilot, they are calling earlier and coordinating the process. It’s more of a concierge experience.”

The nurses are aided by an electronic tool that automates application of the evidence-based guidelines. Once information about the patient and procedure is entered, the tool automatically generates testing and other preop recommendations. When the tool is completed, the nurse can copy the orders to the online order entry system and choose to prepopulate a paper preop testing requisition form (illustrations, p 10).

The tool includes, in addition to testing instructions, tabs with imaging recommendations and references for the testing guidelines, notes Michael Cogliano, MBA, FACHE, administrator of clinical operations at Gettysburg Hospital, who created the tool in Excel.
Preoperative testing tool

The WellSpan tool consists of 3 data entry sections and 1 orders output section. These are excerpts for illustration.

First section
The first section provides for entry of demographic information. This is optional but helpful if the end user wishes to save the document as part of the office record, drive the completion of an order entry form, or have the patient’s body mass index (BMI) automatically calculated and easily accessible.

Second section
The second section allows the end-user to select the surgical procedure being scheduled by placing an “x” next to the procedure. The designation of low, intermediate, or high risk is integral to the testing algorithm and contributes to the determination of orderable tests. Shown is an example of cardiothoracic surgical procedures.

Third section
The third section allows the end-user to select from a variety of patient conditions and risk factors. Again, the user indicates the selection with an “x,” and these risk factors drive the final determination of tests to be ordered. Two section examples are shown.

Orders output section
The orders output section is based on the selections made in the previous sections. In the example, for this patient, the evidence-based orderables would be an electrocardiogram, chest x-ray, WCBC, and BUN/creatinine/electrolytes. No further preop testing is required unless the patient’s physician thinks more are needed based on presenting signs and symptoms.

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He is also working on an algorithm to produce recommendations for when a patient needs a medical consultation, also based on the published evidence and consensus by WellSpan’s physicians.

So far, in the pilot with the new process, the number of unnecessary tests has fallen from 4.6 to 0.3 per patient. Anecdotally, McKoin says, patients are spending 38% less time in the physician’s office because the nurses are guiding patients through the process.

She says the pilot has shown the new process to be a satisfier for patients and the pilot surgeon, and other surgeons are volunteering to join the next phase. The system’s leaders are determining how to provide the necessary resources, including nursing staff, to expand the service.

Automated QI tool
A related spreadsheet that Cogliano developed captures data for quality improvement. This spreadsheet, also with the evidence-based guidelines built in, tracks the tests ordered outside the guidelines and calculates the cost of those tests. The QI tool assists in capturing the cost of providing unneeded services.

“As we try to bend the cost curve and reduce health care expenditures, this is one way of helping to do that,” Cogliano says.

In further refinements, he is discussing with the IT department how the tool could be populated with information from the electronic health record. With the finance department, he is developing a business plan for providing the automated spreadsheet to other health care organizations.

McKoin sees the new preop process, which has been a WellSpan priority, as one way to prepare for bundled reimbursement and for more patients who are insured under government payment rates.

“It’s a complex process, and it’s nice if someone helps (the physicians) optimize it,” she says. “We want to make this an exceptional experience, so why would they want to go anywhere else but WellSpan for their surgical care?”

—Pat Patterson

Resources


