A problem for throughput, safety

Initiative Targets Spotty Preop Paperwork

By Tyler Smith

A new initiative in the hospital’s pre-operative surgery areas aims to improve Epic functionality – not by upgrading what it can do but by getting people to use it in a timely fashion. The change, initiative leaders believe, will improve patient throughput and safety and increase awareness among physicians of the importance of consistently adhering to surgical workflows.

At issue are pre-operative surgical orders, histories and physicals (H&Ps) and interval notes that surgeons must complete before patients have procedures. In the pre-Epic world, that paperwork typically came to pre-op nurses in packets from clinics the day before surgery, ready for review, said Nikki Bach, RN, charge nurse in the outpatient pre- and post-op units.

At that time, nurses generally had sufficient time to review the paperwork and make sure it was in order so surgeries could proceed on time, she said.

It’s a different story today, not because Epic lacks the functionality to handle the necessary paperwork, but at least in part because many residents, fellows and attending physicians may be unsure of how to use it quickly and efficiently, Bach and others said.

As a result, a larger number of patients arrive for surgery missing the necessary pre-op work – a Joint Commission requirement.

New start. After identifying and documenting a variety of issues created by missing or incomplete information, including decreased efficiency, delayed procedures and increased patient safety risk, Bach and a group of hospital providers (see box) compiled data and presented their case to the OR Executive Committee, which agreed to standards that will be implemented in the surgical pre-op areas Sept. 25. The goal: create a smoother and safer preoperational workflow.

For “first-case starts,” the standards are:

» Pre-op orders must be entered in Epic by 6 a.m.

» H&Ps with an interval note – which documents whether the patient has had any changes in health status since he or she last saw the surgeon – or day-of-surgery H&Ps must be entered in Epic by 7:15 a.m.

For the day’s subsequent cases, the standards are:

» Pre-op orders must be entered in Epic two hours before the OR start time.

» H&Ps with an interval note must be entered in Epic 30 minutes before the OR start.

Epic team members and nurses specially trained in the presurgical workflow will be on-site that week to lend support, Bach said.

Documentation disruption. Pre-op documentation gaps have caused a host of problems, according to a report Bach’s group produced after reviewing nearly 600 inpatient and outpatient surgical charts last spring. They found, for example, that less than

Continued
half of the outpatients arrived for surgery with H&Ps and less than
30 percent arrived with completed surgical orders.

Patients who arrive to surgical check-in missing documentation
disrupt workflow through no fault of their own, Bach said. “The
surgeon has to see the patient right before surgery to complete the
orders; we might have to draw labs,” she said. “It’s a fire drill.”

Missing documentation can delay the start of the day’s first cases,
contributing to bottlenecks in scheduling, an obvious problem in a
hospital that routinely runs at or near capacity.

Safety first. But missing paperwork also creates patient safety
issues, Bach noted. Since Epic, the numbers of submissions via
Patient Safety Network – the hospital’s online system for reporting
events that could have or did cause patient injury – have increased
in the pre-op areas, according to the report.

The surgical teams have caught missing medications and labs
during required pre-surgery “timeout” periods, said Research Nurse
Scientist Catherine Kleiner, RN, PhD, who analyzed the chart data.
But those problems cause delays, she added.

“Anytime someone goes back to the OR without everything
being done, it increases the risk of error or of something
important being omitted.”

A presurgical scramble to order labs, administer antibiotics or
complete other crucial tasks also increases stress levels for
nurses and the entire unit, Kleiner said. “That stress increases the
possibility of mistakes,” she said. “We want patients to be ready
for surgery so there can be a good handoff. That makes nurses
more confident and there is less likelihood of errors.”

Bach put it more bluntly. “Staff get frustrated chasing items. It’s
inefficient. Nurses don’t like it.”

The system’s out of order. The electronic medical record (EMR)
is not the source of the problem, said Christopher Raeburn, MD, a
surgeon and Epic physician champion at UCH. But he says the too
frequent documentation delays have exposed a training issue.

“We’ve struggled to get to the level of efficiency in entering
pre-op orders and notes that we had pre-Epic,” he conceded.
“In this particular scenario, the issue is not a problem with Epic
functionality but rather a lack of proficiency in the use of that
functionality.”

Once a user learns the process, he said, entering orders and H&Ps
and attaching an interval note takes a matter of a couple of minutes.

“Epic has the functionality to be as efficient in the perioperative
workflows as a paper system,” he said. “But it can be overwhelming
and frustrating if you don’t know how to use it correctly.”

From a physician’s perspective, he added, “If you’ve talked to
the patient, explained the procedure, gotten his or her consent,
and written a note and placed orders but then are paged by a
nurse who says, ‘You didn’t push the right button in Epic,’ that’s
frustrating,” he said.

“The nurse is just trying to safely prepare the patient for the OR,”
he acknowledged. “But the surgeon may feel as though he or she
did everything already and that this additional work and time is not
a safety issue, just an annoying problem with Epic.”

Training trouble. But recognizing the issue, Raeburn said he
consulted with Jose Melendez, MD, senior medical director of
Anesthesiology, to search for solutions. One conclusion: the pre-op
order issue exposed a “broader problem” in the formal Epic training
residents and faculty initially received.

“It is impossible to absorb everything you need to know about Epic
in the limited time allotted to the initial formal training that users
undergo,” Raeburn said. “It’s like trying to drink from a fire hose.”

A common problem, he added, is it’s difficult to get the word out
and systematically retrain “a heterogeneous and busy group of
users” struggling with some aspect of Epic.

David Corujo, an analyst for the Epic anesthesia team and formerly
a nurse in the Outpatient PACU, worked on determining if the
presurgical documentation issue was attributable to problems with
the EMR.
“The problem is people not knowing Epic,” he said. There are “multiple ways to find patients” in the EMR, he added, and “specific ways to complete specific workflows.” Without that knowledge, a surgeon who needs to complete pre-op orders—or a resident or fellow assigned to the task—might easily add an hour to his or her day.

As Raeburn put it, “If you don’t know the correct way of doing it, it takes you longer, and you’re less likely to do it in a timely way.”

Complicating the problem is the fact that each new set of residents cycling through a surgical rotation at UCH needs training, as do new faculty, said Todd Meier, principal trainer for the hospital’s Epic support team. He said residents and attending physicians receive specific training on entering pre-op orders and interval notes.

“But it’s a lot of material,” he said of the training, which was initially set up as a two-hour stand-alone class but has since been combined with the four-hour inpatient physician curriculum. Ultimately, he said, there is no substitute for repetition.

“The more you use Epic correctly, the more comfortable you become at entering orders, writing notes and accessing patient information for critical analysis and decision making,” Meier said.

Raeburn said he found efforts to individually retrain physicians in the process to be “ineffective and inefficient,” in part because of difficulties in identifying which providers are struggling and then trying to find the time in their busy schedule when they might be willing to meet.

In any event, he added, “It’s virtually impossible to get all residents from the various surgical specialties another one to two hours of training, and by the time they rotate back to the service, they might forget the steps anyway.”

Angles of attack. The alternative, he said, is to “reach a critical mass of knowledge in Epic” through a variety of methods: giving one-on-one help and distributing tips and tricks at small-group meetings and larger gatherings. The Sept. 25 kickoff week will offer a unique opportunity for spreading understanding by a “concentrated campaign of re-education,” he added.

“We’ll have a sizable complement of experts and helpers for a week and a big cluster of activity before 7:30 a.m.,” he said. “We should be able to hit most of the faculty and residents on service.”

Bach said the goal after the kickoff is to identify surgical subgroups that “have had a hard time meeting the standard and target them for additional training.” Perioperative Services has also incorporated the standards into its own “critical success factors” for fiscal year 2013, she said.

“There is no gold standard in health care for completing pre-op work,” Bach said. “We want to lead the way.”

The “preoperative paperwork initiative” team includes:

» Nikki Bach, RN, outpatient pre-op and post-op charge nurse
» Michelle Ballou, RN, nurse manager, Perianesthesia Services
» Christine Woodman, RN, nurse manager, Outpatient PACU and Pre-procedure Services
» Chris Raeburn, MD
» Catherine Kleiner, RN, PhD, research nurse scientist

The problem isn’t Epic functionality, says analyst David Corujo; it’s that people don’t know Epic.