Better data coupled with an at-risk salary model for anesthesiologists have helped one academic medical center to improve its performance for on-time starts and turnover time between cases.

The hospital’s surgical volume was growing, and it had to make the most of its OR time. Yet a lot of the decisions were made based on feelings and perceptions, and not on data, says Brian Davidson, MD, assistant medical director for surgical services at the University of Colorado Hospital (UCH) in Aurora, Colorado. He is also associate department chair for quality and patient safety.

The OR Committee’s discussions centered on the familiar issues—late first-case starts, turnover times, and block time utilization. Better data and a consensus on definitions were needed before the group could make headway.

Dr Davidson, who completed a fellowship in perioperative services management, decided to start 2 projects:
• Define on-time starts and turnover time and begin collecting and sharing data.
• Create an at-risk salary model for the anesthesiologists.

Results show quickly
The program started to show results quickly. Within a week or so after data reporting began, he says, on-time starts in the outpatient surgery center were up to 68%-70% from a previous 35%-38%. On-time starts for the inpatient ORs improved into the mid-60% range from about 40%.

The goal is to achieve on-time start rates of 65% for the inpatient ORs and 70% in the outpatient center, which would be in the top 10% to 15% of performers in the University HealthSystems Consortium (UHC), Dr Davidson says.

Time definitions
The definitions UCH adopted are from the AACD Glossary of Times developed by the American Association of Clinical Directors (AACD), which have been endorsed by AORN and accepted by the American Society of Anesthesiologists. (The glossary is available in the AORN 2012 Perioperative Standards and Recommended Practices.)

Accordingly, on time was defined as patient in the room by the scheduled start time plus 59 seconds. For example, a case with the patient in the room by 7:30:59 would be considered on time. Turnover time, as defined by AACD, is the time from the prior patient out of room to the succeeding patient in the room for sequentially scheduled cases. AACD advises that turnover time should be calculated only if a subsequent case is scheduled to follow immediately. Gaps should be recorded separately.

At-risk salary model
The anesthesiologists were chosen for the new model, not because the group thought they were responsible for long turnovers and late starts, he says, but because that is the department to which Dr Davidson belongs.
Under the plan, 5% to 7% of anesthesiologists’ income is attached to the number of times, or percentage of cases, that start on time.

The model applies to scheduled first cases and turnovers. The anesthesiologist earns the salary back if the case is on time or the anesthesiologist simply enters a valid reason for the delay in the electronic health record. The amount of the earn-back is calculated daily and reported electronically to the anesthesiologists. The amount is about $20 per inpatient case and $13 per outpatient case.

**Reasons for delays**
Collecting reasons for delays enables the department to collect data on causes for lateness. Credit is given to prevent teams from rushing patients into the OR before they are ready, which was a concern of the surgeons and nursing staff. The on-time start data is reported back to individual surgeons and anesthesiologists and to the nursing staff by service.

Improvement was seen “as soon as we started giving data back and saying, ‘If you’re not on time or don’t state a reason, you are actually going to have a decrease in income,’” Dr Davidson says.

The new salary model was introduced January 1, 2009. There was a hiatus from September through December 2011 as a new OR documentation system was implemented. During that time, he says, meeting on-time start and turnover time goals slipped. He says percentages have come back up since the program was reinitiated.

**Data for improvement**
The data on late starts has shed light on where problems existed and has been a fruitful source for improvement projects. A few examples are missing histories and physicals, a surgeon arriving to talk with the family just 2 minutes before a scheduled 7:30 am start; a difficult epidural; complex patients with no preadmission testing visit; a patient waiting to see clergy; and a patient needing to go to the bathroom, a more common reason for delay than anyone had realized.

“We were able to take the data, categorize it, and create a dozen projects to try to reduce the causes of delays,” he says. Nursing has led several of these initiatives.

One improvement is to have patients who will receive a peripheral nerve block or epidural before surgery arrive 30 minutes earlier than previously.

**Staying on top of turnover**
The turnover time goal was set at 30 minutes for patient-out to patient-in.

A tactic that has helped is to use a color-coded desktop timer to raise consciousness about the time between cases. The application was created by the IT department and tied to the electronic medical record.

“This got everyone to focus on the 30 minutes,” Dr Davidson says.

The timer, displayed on screens throughout the department, is started when a patient leaves the OR and counts down from 30 minutes. A nurse can look at the screen, for example, and see, “I’m in Room 14, and we are at 18:50.” At that point, the timer is green. At 25 minutes, it turns yellow and at 30 minutes, red.

Dr Davidson says that one realization is that turnover time goals need to be adjusted for different services. Some services with complex cases, such as orthopedics and neurosurgery, might have improved from 52 minutes to 37 minutes. But they weren’t able to meet the 30-minute goal because of the necessary room cleaning and setups. For other less complex cases, such as hernia repair and basic laparoscopic surgery, the room was ready in 18 minutes.
Initial hesitation
The introduction of the at-risk salary model created some tension initially among nurses and surgeons, who felt they were being hurried, he notes.

He responded by telling them, “We are not trying to hurry. We are trying to get the cases started on time. If we don’t, we want to know why.”

After what he says was “some angst” and with support of hospital, nursing, anesthesia, and surgeon leadership, each of the disciplines has made adjustments to improve its performance. It’s now more widely accepted that being on time is an expectation.

“If you’re going to tackle the problem, someone has to take the lead,” Dr Davidson says. “And everyone else has to realize we are going to keep going.”

How much of a difference has the salary model incentive made?

“My belief is that it’s not about the money,” he says. “Money is just a symbol of what we think is important.”

Having individualized data is the key factor, in his view. More important than the money, surgeons and anesthesiologists are competitive. They don’t want to be at the bottom of the list on any measure. He believes that makes a bigger difference than the small amount of salary they stand to lose for having a high percentage of late cases.

Initially, he says, there was some pressure from his peers to stop the effort, but that was defused once the leadership saw the improvements in on-time starts and turnover times.

--Pat Patterson

Reference