Changing behavior to boost OR’s productivity

Making inroads on on-time first-case starts and turnover time means process changes, of course. But changes won’t take root without a change in behavior.

Cincinnati-based TriHealth attributes the progress it has made to improved accountability by all levels of personnel, from front-line staff to managers and physicians.

The two-hospital system includes Bethesda North, a Level 2 trauma center with 17 ORs, and Good Samaritan with 22 ORs.

Faced with ORs that were not as efficient as they could be, TriHealth adopted Lean management for surgical services in 2009. Staff and clinicians were represented on Lean project teams, generating and testing ideas for improvements.

Raising expectations
Lack of accountability for efficiency was one issue that surfaced. A platform for changing behavior was created by raising expectations and creating systems to reinforce performance.

In progress to date:
• Good Samaritan improved first-case on-time starts by 15%, with 60% of cases now starting within 5 minutes of the scheduled time. Turnover time, defined as close to incision, now averages 44 minutes, a 25% to 30% reduction over a year.
• For Bethesda North, turnover time was reduced from 66 minutes to 49 minutes, while first-case on-time starts rose by 21%, with 57% of cases now starting within 5 minutes of the scheduled time.

Staff satisfaction scores for “my manager holds staff accountable,” and for “overall OR efficiency” rose from 2.6 to 3.5 (scale 1 to 5). The question about “my role is clear” went from 2.4 to 3.2.

Key changes
Key changes the Lean project introduced:
• A tracking matrix outlines specific roles and target timeframes for each step in the process. A tracking form, filled out for each patient, is used to monitor performance and hold staff and physicians accountable.
• A Surgical Services Oversight Committee was formed to serve as the leadership body for interdisciplinary initiatives related to surgical services block utilization and allocation and efficiencies.
• Turnover and start-time processes were redesigned to bring the patient to the OR earlier and anchor the circulator in the OR to coordinate case preparation.
• Parallel processing was introduced, with certain activities taking place simultaneously.

The new process was piloted in each facility before being rolled out to the whole department.

“There were a lot of role and cultural changes. It took awhile, but now it runs smoothly,” says Kathy Stricker, BSN, RN, OR manager at Good Samaritan.
**Staff accountability**

Though the staff was focused on patient safety, they needed a clearer view of expectations for efficiency in room preparation before patients entered the OR. At times, staff members called in sick, meaning coworkers had to work harder. Some didn’t report to assigned rooms promptly or work as a team to expedite room turnovers.

The project team learned in its assessment that “the staff felt managers need to establish clearer roles and accountability for efficiency in preoperative and postoperative responsibilities,” notes Lisa Humphrey, BSN, RN, certified change manager and Lean consultant. Part of the problem turned out to be the management structure. With the OR manager responsible for many employees, oversight of individual behavior was difficult.

**New role for team leaders**

Revamping the structure and creating accountability plans for all levels of personnel helped improve the culture, Humphrey observes.

The role of specialty team leaders was elevated to give them front-line supervisory responsibility. Previously, their role was primarily customer service to the surgeons, such as updating preference cards and making sure specialty equipment was available.

As part of their new responsibilities, team leaders make rounds in the morning to check on attendance. If a staff member is late to an OR to open the room, the team leader sends an e-mail to the management staff.

Attendance and tardiness are tracked. If an employee needs counseling, the manager and team leader huddle to develop an action plan before meeting with the employee.

A manager accountability plan was also developed and presented to front-line leadership and staff during their education. The plan included attendance, communication, and rounding expectations.

**Clear roles, expectations**

New expectations include clearer definitions, target time frames, and staff roles for on-time starts and turnover time. These are outlined in a matrix for each process. (The matrices are posted in the OR Manager Toolbox at www.ormanager.com.)

“We had to define ‘on time’ [for the staff],” Stricker says. “There wasn’t a consistent expectation about being in the room.” “On time” for circulating nurses and surgical technologists for first cases is now defined as 7 am arrival in their assigned OR for a 7:43 am incision time for simple cases.

Start time was redefined as incision time rather than patient-in-the-room time.

“Having the start time be the incision time makes everyone accountable for the start time. That was huge,” says Brian Cameron, CSFA, of Bethesda North.

Incision time is classified by simple, moderate, or complex cases. This recognizes that the interval between the patient’s arrival in the OR and incision varies depending on the complexity of the case. The 50 most common procedures were classified, and the criteria and procedures in each classification are outlined in a matrix.

**Tracking affects behavior**

The start-time and turnover matrices are used as tracking tools for monitoring behavior. Along with the target times, the tools have space to record the actual times. The staff fill out a tracking tool for each patient.

The tracking sheets have had a big effect on behavior, Stricker notes. At the begin-
ning of the project, the sheets were reviewed daily. Team leaders and managers communicated individually with staff members who needed reinforcement and support in meeting the targets.

“It gave the staff an opportunity to talk to the team leaders or management and work with them to move the project forward,” she says.

Humphrey acknowledges that managing staff through the changes has placed additional demands on managers. “They had to take time to follow up, reinforce, and have individual conversations with the staff.”

Process changes
In addition to raising the accountability bar, the Lean team forged process changes for on-time starts and turnover time.

On-time start improvements
• The case cart is checked by a front-line leader or night shift staff to free the surgical technologist to scrub and open supplies.
• The circulating nurse stays in the OR instead of going to the preop area to get the patient. The patient is brought by an OR assistant, surgical assistant, or anesthesia provider. The circulator performs the assessment as the patient arrives in the room.

Surgeons see a benefit in having the surgical assistant in the preop area, Cameron says, noting that it encourages communication and improves team dynamics.

The change was a big one for nurses, Stricker says, because they must trust that the chart is complete and that the patient will be ready upon arrival in the OR. On the other hand, says Cameron, having the circulator in the room is important to continuity of care because the circulator is aware of what is being opened, is present for the count, and prepares medications.
• Surgeons are expected to arrive by 7:20 am so they can mark the surgical site for a case with a 7:43 am incision time for simple cases at Good Samaritan. Patients are not taken to the OR until the site is marked.
• The surgeon’s arrival is recorded on the tracking tool, and surgeon tardiness is addressed by the physician governance team.

A positive tone is struck with the surgeons. “When a surgeon is consistently late, the first step is to identify how we can help them meet their goal,” says Gabby Hunter, BSN, RN, OR manager at Bethesda North.

A further step, if needed, is to remove the surgeon’s ability to perform a to-follow case until the surgeon has shown he or she can meet the target times set.

“The surgeons are supportive of accountability and willing to take action on that,” Cameron adds.

Turnover time improvements
• The staff performs some tasks in parallel. Examples include setting up part of the case after the patient enters the room and having OR assistants enter the room at the end of the case before the patient leaves to bring additional trash containers and the suction canister disposal unit.
• For to-follow cases, the circulator calls the preop area 20 minutes before the end of a case so preparations for the next patient can be completed.
• Surgeons were asked to go to the preop area immediately to mark the next patient’s site before meeting with the previous patient’s family. That way, the next patient can be brought to the OR immediately.
• An additional specimen drop-off area was added to reduce the distance for delivering specimens.
In a pilot study in 2 ORs at Good Samaritan, anesthesia assessments are faxed to the OR to assist with case preparation. If this is successful, more ORs will be included.

**Sustaining the gains**

Senior leadership buy-in for the Lean project helps ensure the improvements will be sustained, Humphrey says. Top executives, including the chief operating officers and chief medical officers from both sites, have attended team meetings.

“Having the process improvement staff involved was a huge benefit,” Cameron adds, because it sent the message that the organization is engaged and capable of moving forward.

All managers and staff received education on managing change, which gave them a common understanding “of what kind of emotional journey they were going to go through,” Humphrey adds.

The administration continues to set goals and monitor progress on OR performance.

“There was a lot of emphasis that this isn’t just something we are looking at this year. It is something we have to do to remain competitive. It is the direction we’re heading,” Cameron notes.

“With accountability to the whole organization, you have to pursue the goals. It’s not an option. Positive comments from staff and physicians add to the motivation.”

—Pat Patterson

*The matrices for start-time tracking and roles are in the OR Manager Toolbox at www.or-manager.com.*