Efficiency soars in wake of strategic OR cultural changes

Changes in staff responsibilities and greater collaboration have contributed to dramatically improved first-case on-time starts at the University of Louisville Hospital, Louisville, Kentucky—from about 35% to 86% in a little over a year. Turnover time has been reduced, too, with slow but steady progress suggesting that revamping existing structures can pay off.

The academic medical center, which has 14 ORs and an annual case volume of close to 9,000, serves as a Level 1 trauma center for a relatively large uninsured patient population. When Lisa Jackson, MHA, BSN, RN, CNOR, began her tenure there in 2009 as director of the main OR, she found a culture that lacked a focus on efficiency.

Over the past 4 years, Jackson has worked with her management team to turn the OR culture 180 degrees so that it now focuses on a collaborative approach to achieving efficiency while still maintaining patient safety and excellent outcomes.

Jackson spent the first few years laying the groundwork for change. “In the first year, I didn’t force major changes but instead helped the management team understand that change would come,” she says. “I had to take it slow.”

In March 2012, the management team accelerated change by launching “March Madness,” an appropriate theme given that the University of Louisville is known for its excellent basketball team. A key part of March Madness was assigning a certified registered nurse anesthetist (CRNA) to partner with OR nurse leaders to improve throughput.

The OR soon found significantly improved outcomes. The percentage of first cases starting on time (within 5 minutes) rose from about 35% in December 2010 and early 2011 to a range of 82% to 86% in the fourth quarter of 2012.

Here’s how the OR at University of Louisville Hospital did it.

Organizational changes

Jackson began by working with her management team, which included leaders from the sterile processing department, preadmission testing, and preoperative, intraoperative, and postanesthesia care units, to make changes so staff would have what they needed to do their jobs. Early on, it was made clear that the OR had the complete support of the administrative director of surgical services, Marty Brewer, MA, BSN, RN, CNOR, and the hospital executive team, which would approve the resources and financial support required for the changes that needed to be made.

“There were no preference cards, and people had to scramble for instruments,” Jackson says of one of her early challenges.

An OR system support specialist was hired to update the OR information system and guide the preference card update; the RN team leaders, who are staff nurses, created the cards based on their clinical knowledge. Within the first year, Jackson assumed responsibility for the sterile processing department, which helped in managing instrument availability.

Another early step was tackling the need for OR governance. Brewer and Jackson formed a perioperative governance committee, called the perioperative management team, which includes OR leaders (Brewer, Jackson, and clinical managers), anesthesia
and surgeon leaders, a representative from the executive team, and a representative from quality and patient safety.

One of the first tasks of the committee was to create an OR scheduling policy and procedure. The perioperative management team now routinely reviews block time utilization along with other key performance indicators.

**Daily dose of data**

In March 2012, the chair of the anesthesia department appointed Ian Farah, CRNA, to be the dedicated anesthesia charge person who would assist the OR charge nurse in coordinating the daily schedule—a move that Brewer and Jackson advocated for and
that Jackson credits with helping to create momentum for a deeper look at efficiency, beginning with first-case starts.

Every day, Brewer, Jackson, Farah, and the clinical managers for the preoperative area and the OR were in the preoperative/holding area to monitor first cases headed to the OR.

“We stood at the desk and watched,” Jackson says. “For the cases that didn’t start on time, we determined the cause of the delay.” Sources of delays ranged from the surgeon or resident not being present to problems with insurance authorization.

Each day, Jackson sent an email with the percentage of first-case on-time starts and a list of cases that didn’t start on time, including the reason why, stating the reason objectively. The email went to C-suite executives, hospital vice presidents, chairs of the OR governance committee, surgical department chairs, the anesthesia chair, Farah, the preadmission testing charge nurse, and OR nurse leaders, among others. This helped keep upper-level administrators informed so that they could speak with physicians behind the scenes and be supportive of needed changes. This strategy paid off when Jackson was able to obtain more resources for the preadmission testing department.

“Any time we find something that is going to be a barrier to being efficient, we address it in real time,” says Jackson. In the case of first-time starts, that included developing a new policy requiring patients to receive a history and physical and to sign surgical consents before the day of surgery. If a resident is late to a case, Jackson or Farah talks with the resident first, and if the situation doesn’t improve, the next step is the surgeon who has authority over the resident.

Once improvement had been sustained over about 4 months, Jackson substituted a monthly emailed report for the daily emails. However, the leadership team (minus Jackson and Brewer) still meets in the OR every day to monitor first-time starts.

Farah plays a significant role in achieving on-time case starts. He talks with surgeons the night before they operate to ensure they are ready for their cases, letting them know if there is missing information such as a history and physical, and he follows up on the day of surgery, starting at 6 am.

The team is also working on reducing turnover time, which is slowly trending downward from 42 to 45 minutes during the fourth quarter of 2011 to 39 to 40 minutes during the fourth quarter of 2012. “We’re trying to reduce it by 3 minutes each year,” Jackson says, with a target of 37 minutes for 2013. Strategies to reduce turnover time have included a Lean Six Sigma project to study time between cases, improved communication, and ongoing efforts to make sure patients are present and ready for to-follow cases.

“The number one thing you have to have to achieve efficiency is data, and you have to share that data with all key players,” Jackson advises. She participates in the OR Benchmarks Collaborative (McKesson, San Francisco), so she can compare her hospital’s data against national averages. (The OR Benchmarks Collaborative provides 20 key performance indicators that subscribers can analyze and benchmark against other facilities nationwide.)

Preparing patients
In preadmission testing, adding 3 nurses to the original 2 and adding a certified nursing assistant/unit secretary, who assists with paperwork and tasks such as ECGs, helped improve efficiency.

For example, Jackson says, patients scheduled to arrive the day of surgery are evaluated by phone or a visit before that day. The staff issue appointment reminders
and call physician offices when a history and physical or surgical consent has not been completed before the day of surgery. Patients who miss their preadmission testing appointment are called and rescheduled.

The preadmission testing now has 4 rooms instead of 3. Electronic documentation allows easier access to data such as how many patients are seen or called before surgery.

**Factors for success**
Jackson says that improvements in preadmission testing, better on-time case starts, initiation of a designated CRNA for running the schedule, surgeon and anesthesia governance, and accountability are the top contributors to improved efficiency. But the team isn’t resting on its laurels. “We now see what we can do,” says Jackson, “and we’re proud of what we’ve accomplished.” The team plans more improvements as they continue their quest for better efficiency. ✤

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