As with most busy ORs, we were looking to improve our efficiency. Consultants were brought in and gave recommendations, but it did not change our culture or improve our on-time starts. We had meetings with anesthesia providers, surgeons, and nurses. The results were differing opinions on the definition of an “on-time start,” the lack of credibility of the data, who determined the cause of the delay, potential bias, and lack of accountability.

As someone who has heard many of these conversations over the years, I wanted to make a change. I wanted to provide accurate data that reflected the true causes of our delays.

As a pediatric tertiary referral center and Level I trauma center with 12 staffed ORs, we perform complex surgery, including open-heart procedures, cranial reconstructions, and posterior spinal fusions. Our patients may have several comorbidities, with more than one service involved in their care. These factors contribute to complicated setups and multidisciplinary coordination, which also affects first case on-time starts.

Involving nursing staff

I knew the nursing staff would be integral in offering insight, providing suggestions and helping to influence change.

I had several conversations with the nursing staff, explaining that the purpose of collecting data was to identify areas for improvement. I wanted to ensure they understood there were not negative consequences for them if nursing was the cause of the delay. The intent was to help them to get first-case patients into the ORs on time by providing the support they needed.

Collecting data

In January 2009, I started manually collecting data on a daily basis. I reviewed the charts of each patient who had a first-case start, documenting the date, surgeon, anesthesiologist, time scheduled, time in room, cause of delay, and nursing/technologist staff in the room. The causes of delays are documented in the perioperative nursing information system.

The average first-case on-time start for January 2009 was 21%, meaning the patient arrived in the OR room on time. In February 2009, 22% of first cases were in the OR room on time. (Previously, we had reached consensus that a case would be considered late if the patient arrived into the OR more than 5 minutes past the scheduled in-room time.)

Data starts discussions

The percentage of on-time starts was posted daily on the add-on board at
the front of the department. Posting the on-time starts generated discussion and brought the data to everyone’s attention.

I continued to have conversations with the nursing staff and started to meet with the chief of anesthesia and chief of surgery. I asked that we set aside differences and blame and trust each other. We had to have a starting point and take action on what we could improve.

After I had collected a few months of data, trends became evident. I met with the chief of anesthesia and reviewed the data I had collected. He started having discussions with his group, which is contracted with the hospital.

I also met with the chief of surgery and reviewed the data. He asked for a separate report that showed delays by individual surgeon. He followed up with individual surgeons, often that same day, and helped to bring awareness to unnecessary delays. He also asked that each surgeon receive a copy of his or her individual delay data. Our CEO and the department chairs helped provide leadership in setting expectations.

As the months passed, and the data spoke for itself, it helped to reinforce that we were on the right track. Throughout the year, data was presented to the nursing staff and the OR committee. This enabled everyone to see the progress being made. It also offered an opportunity to hear feedback and suggestions for improvement.

**Results show improvement**

From January through December 2009, we improved on-time starts from 21% to a 60% high, with an average of 47.25% for the year. Comparing the first quarter of 2009 (25%) to the first quarter of 2010 (62%), we have improved by 37%. I am also very proud to say we have had several days that 100% of first cases started on time.

**Nursing makes changes**

As we collected the data and our on-time starts improved, we realized nursing would need to make some changes. Issues were discussed at staff meetings and during rounds. We brainstormed for ideas and solutions that would help and implemented the following:

- A third staff member was added to the night shift so there would be adequate staff to manage first cases and prepare the rooms.
- Staffing in the postanesthesia care unit was adjusted to have nurses arrive earlier for the number of ORs finishing at 8 am to 8:30 am.
- First-case patients and same-day surgery staff were scheduled to arrive one-half hour earlier because, with surgeons and anesthesia providers arriving earlier, nurses had less time with patients.
- Having patients ready on time placed more pressure on the OR nurses to prepare rooms for complex cases. Nurses have used that time but feel rushed and stressed to get into the room on time. We are having discussions on how to improve this situation, which includes providing a second circulator for complex cases, having night shift staff assist the circulator with opening supplies, confirming implants with sterile processing the night before, checking on blood, and possibly providing more ancillary support.
- We have also discussed having OR staff arrive earlier or changing our expectation for OR nurses to be in the room by 7 am instead of 7:10 am. Through all the discussions, we have reinforced that the goal is to provide what is needed to help nurses bring patients to the OR safely and on time.
A special challenge

Our craniofacial patients often require a multidisciplinary team and present a challenge in getting them prepared on the morning of surgery. To allow for preop preparation, we would like these patients to be seen in the preop clinic the day before to surgery, but many families cannot afford the extra expense of a hotel. We are exploring possible housing options and financial assistance for these patients and families so any issues can be addressed and resolved the day before instead of causing a delay on the morning of surgery.

On-time incentives

At this point, our incentives involve giving a lot of positive feedback on improvements and recognizing those efforts. Regarding penalties, surgeons have been notified recently that if they are consistently late, their 7:30 am start time will be given to another surgeon.

Advice for other managers

My advice for other managers is to start with accurate data collection and to post the percentage of on-time starts. I did not have any formal meetings or discussions with physicians.

In retrospect, I would have had even more conversations with nursing staff on all shifts to explain the goal and intent of the data collection. Some physicians expect the charge nurses to have an immediate fix or hold them accountable for any delay problem. The staff nurses can be caught in the middle between anesthesia providers and surgeons because they are documenting the reason for the delay. The nursing staff has to know they are supported, and there will be followup if they are verbally harassed or feel patient care is compromised.

Data generate discussion and interest. Review the data with anyone who will listen and gain support from physician leadership. Be prepared for questions and pushback, because some individuals will be defensive, and some will not want to change.

When facing resistance, I suggested that we could continue to rehash the same conversations we have had for years, or we could all make a choice to take action and make improvements. I also reinforce that it takes the whole team working together to be successful in improving on-time starts.

—LeAnn Northam, RN, MSN, CNOR
Clinical Manager, Riley Operating Room
Riley Hospital for Children, Indianapolis

Examples of delays

**Surgeon:** 58
- Late: 26
- No consent: 21
- Working elsewhere: 11

**Anesthesia:** 23
- Consent: 14
- Anesthesia late: 5
Talk with family: 2
Needed in another OR: 1
Complex setup: 1
(Anesthesia equipment: 6)

**Patient/family: 43**
- Had questions: 30
- Late: 9
- Speak with doctor: 4

**Preop medication/testing: 16**

**OR: 13**
- Complex setup: 11
- Change in assignments: 2

**Transport: 18**
- Inpatient unit not ready: 11
- Delay: 7