Word has traveled to the executive suite that a high percentage of the OR’s cases are starting late. There are also rumors of 1½ hour turnover times. As the manager, you know these don’t reflect the OR’s actual performance. How can you demonstrate that?

One option is a dashboard that tracks key metrics. An OR dashboard can serve as a management tool that tracks the department’s performance, tells the OR’s story to senior leadership, and spots trends in areas that need improvement. Attributes of an ideal dashboard are described in a new article by Kyung W. Park, MD, MBA, and colleagues from Ohio State University and the University of Vermont (sidebar, p 7).

For a dashboard to be successful, the foundation needs to be laid. Metrics need to be selected carefully, data must be reliable, and resources must be allocated to maintain the dashboard.

**Starting a conversation**

As a management tool, a dashboard is a way “to start a conversation. You want to talk about an issue and drive it to a different place,” says Renae Batté, MN, RN, CNOR, regional director of perioperative services for Franciscan Health System, Tacoma, Washington.

She and Steve Alley, MPH, RN, administrative director of surgical service lines at Seattle Children’s Hospital, shared tips on dashboards at the fall 2010 Managing Today’s OR Suite Conference in Orlando.

Speaking from their 30 years of experience in management, Batté and Alley discussed what they’ve learned from successful, and not so successful, dashboard efforts. Other managers share dashboard examples, starting on page 8.

Here’s their advice.

**What’s your objective?**

Decide what purpose you want the dashboard to serve and who the audience will be. Do you need to make the OR’s case to senior executives? Do you want to guide the OR’s operational performance? Are you on a mission to improve clinical quality?

A dashboard is a way to tell the OR’s story. For example, by tracking on-time starts, the dashboard can provide facts for guiding discussions past rumors and anecdotes.

A dashboard can help measure progress on clinical goals, such as Surgical Care Improvement Project (SCIP) measures or infection prevention efforts such as the number of cases between surgical site infections for total hip replacements.
Selecting metrics

Key advice—go slow to go fast. Start with a few metrics, and keep it simple.

“Like any project, take time to think about what needs to be accomplished and who needs to be involved,” says Alley.

“In our experience, if you push things through too quickly, soon you’re back trying to re-solve the same problem. “You may lose valuable time and credibility.

Additional suggestions:

• Decide how many metrics you can reasonably obtain data for and manage.

• Use standardized definitions where possible. Examples are AORN’s Perioperative Nursing Data Set (PNDS) and the procedural times glossary from the American Association of Clinical Directors, which has definitions for terms such as anesthesia start and room ready.

• Reach consensus in your own organization on definitions for metrics like start time and turnover time. Consensus on definitions is critical for the data to be accepted later.

How good is the data?

Dashboards are typically created in Excel or similar software, with data gleaned from financial reports, the OR information system, and other sources. Identifying the data sources goes hand-in-hand with selecting metrics. Another critical factor is planning the resources to obtain the data and keep it clean and up to date.

“If it’s worth doing, it’s worth assigning the resources,” Alley says. That may mean assigning an analyst or nurse manager with data skills to dashboard maintenance.

If your databases aren’t what you’d like them to be, realize that even a low-tech dashboard can be effective.

“A dashboard doesn’t have to be fancy to start a conversation,” says Battié.

A nurse manager in one OR reports on-time starts on a white board, with stars for on-time surgeons and a skull-and-cross bones for the tardy.

The board gets the physicians’ attention and sparks competition, she notes. “The doctors walk by and say, ‘Why didn’t I get a star today?’”

The drawback is that this type of dashboard doesn’t record and report data over time.

Balance your metrics

There’s a danger in living entirely by the numbers. Having a balanced set of metrics can avoid that problem. One well-known model is the Balanced Scorecard developed by Robert S. Kaplan and David P. Norton of the Harvard Business School in the 1990s. The scorecard adds strategic and quality metrics to the traditional financial metrics for a more balanced view of performance.

For perioperative services, Battié offers these examples of metrics for a balanced OR dashboard:

• clinical outcomes (eg, skin breakdown, incorrect counts)

• operational outcomes (eg, permit signed, case cancellations)

• financial metrics (eg, direct staff cost/OR minute, supply cost/case)

• institutional initiatives (eg, patient satisfaction, surgeon satisfaction).

Display the data effectively

In deciding on the dashboard’s format, consider your audience and
what’s been successful before. A few principles:

• Make it visual. Color graphics like pie charts and line graphs often tell the story better than tables with numbers.

  Battié likes the 3-second rule for designing reports: “If someone can’t tell what you’re saying in 3 seconds, it won’t be effective. Try it out on people who aren’t familiar with the data—is the story you’re trying to tell clear?”

• Print a clear title, date, and metric definitions on every page of dashboard reports.

• Use white space for readability—don’t crowd a printed report.

• Determine whether to set minimums and maximums for data to exclude. For example, will you exclude turnover times over 90 minutes as outliers?

• Decide how often the dashboard will be updated, depending on the audience.

Trigger points

Set scores and targets for dashboard metrics “so you will know what you are reaching for,” Battié says.

What will be the triggers telling you that you need to take action? Perhaps it’s a downward trend away from your goal or a percentage change of 20% or more.

Some dashboards are color coded with green for “in range,” yellow for “need to watch,” and red for “take action.”

Dealing with data denial

Wherever there’s data, there’s physician skepticism. Some common reactions: “My patients are sicker.” “I had some extreme cases.” “The data is too old.”

Interestingly, says Alley, there seem to be fewer criticisms when the data carries good news than when the news is bad.

Forming partnerships with physicians, being honest about data deficiencies, and identifying opinion leaders are some ways to respond.

“Involve physician leaders so when they are approached by a surgeon, they can help support the data and process,” Alley says.

Identifying an opinion leader who understands the data is helpful. “The data doesn’t have to convince all of the doctors. But a few key leaders who understand the data can help drive it,” Battié observes.

Physicians tend not to like data that has been interpreted, she adds. “Willingness to show the raw data shows you are willing to partner with them in doing the right thing with the data.”

Be transparent

Alley advocates transparency from the beginning. Talk about variability in the data and why it occurs, he advises. Be clear about the level of detail you are able to get, and not get. And be willing to admit mistakes.

“We’ve all experienced the comment, ‘Your data is wrong,’” he notes. “We know it’s not always wrong, but sometimes it’s incorrect.” Perhaps a surgeon’s block utilization excluded some cases because they were misclassified in a different specialty. Being candid about such errors helps to build trust.

“A dashboard can help you present data and build trust in the information,” he says. “Then maybe you can get to the root cause of issues you are trying to resolve.”
High-tech dashboards

More powerful high-tech dashboards that are easier to create are coming. Seattle Children’s is starting to use business intelligence software named Tableau (www.tableausoftware.com).

The OR Benchmarks Collaborative, a collaboration between OR Manager, Inc, and McKesson, offers a web-based dashboard with key performance indicators that enables subscribers to drill into their data and benchmark. (See p 12.)

Business intelligence software, by one definition, is designed to mine existing databases to report, analyze, and present data in a way that aids decision making. Typically, the software analyzes data stored in databases, such as the OR information system, meaning a dashboard doesn’t have to be created and maintained separately.

Tableau, for example, can produce dashboards and reports quickly from several databases or a database and an Excel spreadsheet.

“Tableau is able to point to a large database and ‘farm’ information about what is going on,” Alley says. “We are finding information we didn’t even know we needed to know about.”

In one example, he had heard complaints that cases in the hospital’s new surgery center were running ahead of schedule, so far ahead that teams were often waiting for the next patient.

He used the software to look at the scheduled versus actual case minutes and was quickly able to get a graphic report showing big gaps between the scheduled and actual times. He realized that because cases were scheduled by increments of 10 and 15 minutes, the scheduling system was overestimating the time needed for the center’s shorter cases.

“It’s a work enhancement tool that allows quicker development of dashboards,” he says. “Once you have it developed, you can sustain it without a lot of energy. It’s much easier than trying to maintain an Excel dashboard on a monthly basis.”

—Pat Patterson

References


7 dashboard attributes

An ideal OR dashboard would:

• be aligned with the overall goals and objectives of the OR and parent institution
• provide accurate contextual and knowledge-driven data
• display information visually so outliers, trends, and key variations can be grasped quickly and lead to alerts and action plans
• present data that is real time or nearly so
• present a logical hierarchy of information with drill-down capability
• be internet- or intranet-based for timely accessibility
• be part of an organization that accepts objective data as the basis for decision making.