

OR Business Performance

Comprehensive dashboards paint a fuller picture of OR performance

OR Business Performance is a series intended to help OR managers and directors improve the success of their business.

Data-rich dashboards are an effective way to communicate with surgeons and align them with OR goals, but many reporting strategies have not kept pace with changes in the surgery market.

Outcomes-based payment models have made traditional surgeon dashboards inadequate. To remain effective, physician dashboards that capture more comprehensive information should be used to track a broader range of performance metrics.

Getting started

Advanced physician dashboards differ from traditional dashboards in 2 ways. First, traditional surgeon dashboards focus on OR efficiency. But while efficiency measures are still important, dashboard reports should also track clinical processes, patient outcomes, costs, and other performance metrics that form the heart of new Medicare programs.

Second, traditional OR dashboards are geared largely toward surgeons. But anesthesiologists play an increasingly important role in OR efficiency and outcomes. New dashboards should expand beyond surgeon measures to include key anesthesia metrics.

Leading ORs are developing comprehensive dashboard reports that cover the full spectrum of provider and performance metrics (chart). The first step is to identify clinical metrics that align with the goals of payment reform.

Clinical metrics

Begin by analyzing new payment models from the Centers for Medicare & Medicaid Services (CMS). The Hospital Value-Based Purchasing (HVBP) Program includes incentive payments and payment penalties tied in part to surgical quality and outcomes (<http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/hospital-value-based-purchasing/index.html?redirect=/hospital-value-based-purchasing>). CMS has also introduced payment penalties for hospital-acquired conditions (HACs). Hospitals with the highest HAC rates will be subject to a 1% payment reduction starting in fiscal year 2015. In addition, Medicare readmission penalties may soon cover rehospitalizations related to certain heart and vascular procedures.

To perform well under these programs, hospital ORs should track a variety of surgical quality metrics. Effective physician dashboards will include a selection of measures from:

- **Surgical Care Improvement Project (SCIP).** Seven SCIP measures have been part of the HVBP Program from the beginning. Starting in fiscal year 2015, HVBP will add an eighth SCIP measure: postoperative urinary catheter removal on postoperative day 1 or 2 (<http://www.qualitymeasures.ahrq.gov/content.aspx?id=35534>).
- **National Surgical Quality Improvement Program (NSQIP).** The NSQIP tracks hospital performance on several payment-sensitive surgical complications. For ex-

ample, deep vein thrombosis, pulmonary embolism, and surgical wound rupture are all part of the composite patient safety measure (PSI-90) that will be incorporated into the HVBP calculation in fiscal year 2015.

- **National Anesthesia Clinical Outcomes Registry (NACOR).** This relatively new reporting program is fast becoming a leading source of benchmarking data (<http://www.aqihq.org/>). NACOR tracks anesthesia and surgery outcomes, including major and minor adverse events. As a starting point, consider including the Physician Quality Reporting System (PQRS) measures for anesthesia—timely parenteral antibiotics, prevention of catheter-related bloodstream infections, and perioperative temperature management.
- **Medicare HACs.** Surgery-sensitive Medicare HACs include retained foreign objects and air embolisms. NSQIP measures several other HACs, including surgical site infections.
- **Other measures.** Blood infections are not considered HACs, but they are part of the HVBP composite patient safety measure. Medicare readmission penalties now make it important to track 30-day readmission rates. Your OR's overall morbidity rate and its observed/expected mortality ratio are among the all-department metrics that could be included in a dashboard report.

Operational metrics

OR inefficiency leads to low utilization, which in turn results in low revenue. Inefficiency also represents high costs, which can reduce shared savings for hospitals that participate in an accountable care organization (ACO) or other bundled payment arrangements. Physician choices affect operational performance, so dashboards should include several key efficiency measures:

- **Operational efficiency.** Two metrics form the cornerstone of OR efficiency—first-case on-time starts and same-day cancellations. These measures allow OR directors to accurately gauge the overall efficiency of departmental processes.
- **Efficient utilization.** Block time utilization is 1 of the most important OR metrics. In well-run surgery departments, surgeons understand that they must maintain a threshold utilization rate (75% to 85%) or lose their designated block. (See *OR Manager*, May 2013, pp 21-24.)
- **Anesthesia efficiency.** When anesthesiologists and certified registered nurse anesthetists (CRNAs) arrive late, OR cases cannot start on time. Accordingly, dashboards for these providers should track preop arrival time (days on time/day in period). The anesthesia dashboard should also track average OR-to-induction time and average close-to-PACU (postanesthesia care unit) time. These measures gauge the provider's impact on overall throughput efficiency.
- **Other efficiency metrics.** Some hospital ORs report average turnover time, close-to-cut time, and average case time (for both the individual surgeon and the department as a whole). These metrics gauge an OR's opportunity to improve efficiency. Case time reporting is usually most successful in academic medical centers or other settings with strong surgery department leadership.

Other metrics

One of the core goals of dashboard reporting is to gain physician cooperation in meeting operational and financial goals. Leading hospital ORs share economic performance with the surgical staff. But while some financial metrics belong in a physician dashboard report, others are problematic.

- **Costs.** Sharing supply costs with physicians is essential. Surgeons must understand how their supply preferences affect total case expenses and how expenses

Sample Physician Dashboard

Below is an abbreviated selection of measures that could be part of a physician dashboard report. A full dashboard would include a broad range of quality, cost, efficiency, and patient satisfaction metrics.

SCIP Performance

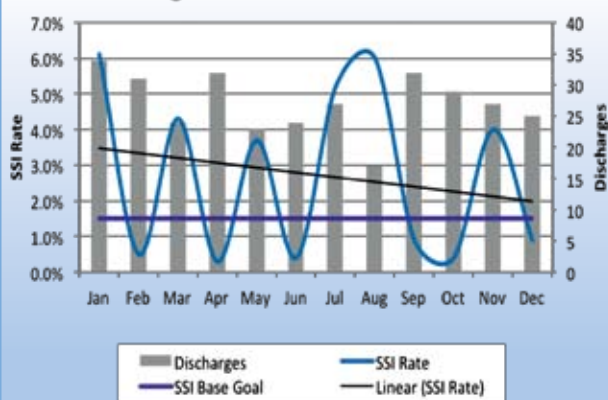
| Measure | Quarter | YTD | Goal |
|--|---------|-----|------|
| Antibiotic within 1 hour of incision | 98% | 97% | 100% |
| Antibiotic selection for surgical patients | 99% | 98% | 100% |

* Note: SCIP report should include all HVBP measures

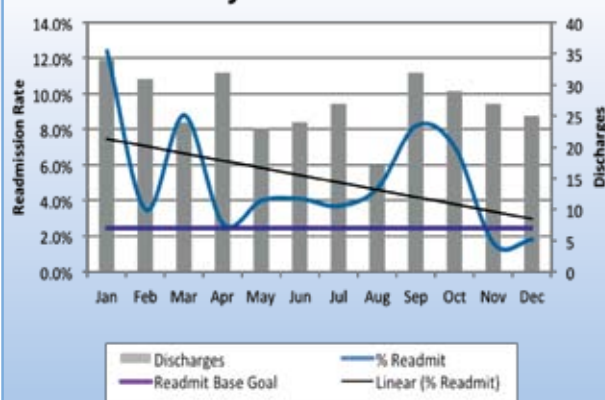
Number of Cases

| Primary procedure | 2012 total | Jan-13 | Feb-13 | Mar-13 | 2013 YTD |
|------------------------------|------------|-----------|-----------|-----------|-----------|
| Laparoscopic cholecystectomy | 55 | 4 | 6 | 5 | 15 |
| Laparoscopic appendectomy | 31 | 3 | 3 | 4 | 10 |
| Laparoscopic gastric bypass | 26 | 2 | 3 | 5 | 10 |
| Thyroidectomy | 19 | 1 | 2 | 2 | 5 |
| Bowel obstruction repair | 17 | 2 | 2 | 1 | 5 |
| Other | 104 | 8 | 10 | 11 | 29 |
| Total | 252 | 20 | 26 | 28 | 74 |

Surgical Site Infection Rate



30-Day Readmission Rate



compare to case reimbursement. (See OR Manager, July 2013, pp 21-23 and August 2013, pp 21-23.) In some settings, it may also make sense to share labor cost metrics with providers, particularly with surgeons who request additional staffing.

- **Length of stay (LOS).** Not many hospitals include LOS in surgeon dashboards. With the growing emphasis on costs, however, it may make sense to begin reporting this metric. One reason is that awareness of LOS could help surgeons adhere to proven care pathways. If your hospital offers a “joint camp” for joint replacement patients, for example, focusing surgeons on LOS could encourage greater use of this resource.
- **Revenue.** While surgeons should understand hospital economics, do not include revenue metrics such as contribution margin in surgeon dashboards. This comes close to “economic credentialing.” Instead, address efficiency/cost problems directly with surgeons.
- **Patient satisfaction.** Patients’ experience of care is increasingly a factor in pay-

ment. HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) scores currently make up 30% of a hospital's HVBP score. Consider including the HCAHPS "doctor communication" and "pain management" scores in your physician dashboard.

Effective physician dashboard reports are tailored to the specific needs of an organization, so you should include any "custom" metrics that are appropriate for your OR. For instance, dashboards at an academic medical center might track publications. In addition, any quality or service initiatives that are unique to your hospital should be tracked in your physician dashboard report.

Building and using dashboards

A dashboard reporting program can "crash" if it is not carefully planned and introduced.

First, establish standard nomenclature for all metrics. For instance, there are several different ways to calculate turnover time. Obtain agreement on a single method, and make sure it is used consistently.

Next, ensure accurate data input. Assign staff to capture data, and train them in correct procedures. "Garbage in, garbage out" applies to dashboard reporting.

Then create the formulas to produce your customized dashboard reports. This can be done with a business intelligence software package (such as SQL or Crystal) or through your information system's native reporting capabilities.

Once the reporting system is in place, conduct a pilot reporting project using data for 1 surgeon or 1 specialty. Run the reports for your pilot providers, then cross-check the data manually to validate your automated formulas.

After the system has been validated, roll out the dashboard program to the entire surgical services medical staff. Physician leadership is critical to staff acceptance. Ideally, a surgical services executive committee (SSEC) will sponsor the reporting initiative.

Update and disseminate dashboard reports regularly (most ORs report data on a quarterly or monthly basis). In private hospitals, reports are generally provided only to surgeons with designated block time. In academic centers or hospitals that employ a large percentage of surgeons, reports are shared with the entire staff. Every physician's report should be personalized with his or her individual case volume. In addition, provide department or division comparisons for select measures.

While OR management creates and maintains dashboard reports, physicians must take the lead on using them to improve performance. One of the core functions of an SSEC is to enforce utilization thresholds. Physician leadership should also monitor clinical metrics to identify problems and opportunities for improvement.

Next month

Dashboard reporting represents a commitment to capturing comprehensive surgical services data. Tracking robust data ultimately enables better management of the entire OR. The next "OR Business Performance" will look at another strategy for leveraging data—hiring a business manager for your OR. Learn how to find the right candidate, outline responsibilities, and work with a dedicated business manager to improve your department's financial and operational performance. ❖

This column is written by the perioperative services experts at Surgical Directions (www.surgicaldirections.com) to offer advice on how to grow revenue, control costs, and increase department profitability.