**Improving Operating Room Performance in a Center of Excellence**
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When implementing a center-of-excellence strategy, a hospital needs to revise its accountability structure, modify its information and reporting system, and establish a culture that supports effective utilization of operating room resources.

## AT A GLANCE

The financial success of a center of excellence frequently depends on effective utilization of the operating room. Therefore, it's important align the strategy, structure, information and reporting systems, culture, and behavior of both entities. Moving from an anecdotal decision-making process to one driven by data can serve to enhance the quality of decision making.

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It's probably one of the most intimidating places in your hospital. You may not know much about what's done there, and the professional staff may view you as a neophyte. At worst, you may even be despised.

When so many financial and line managers are made to feel this way, is it any wonder that this environment--the operating room --is particularly prone to being poorly run?

Yet in an era of steep revenue reductions and rising costs, there's no place for such personal reservations. Because of its volume of activity, a well-managed OR can significantly contribute to (or detract from) a hospital's overall financial performance. To ensure a positive contribution, financial and line managers must work closely with the surgical and anesthesiology staffs to help the OR realize its full potential.

Where should these efforts begin? As the success of one hospital shows, improved financial performance depends largely on four key considerations: strategy, structure, information, and behavior.

### Strategy

As part of their strategic focus, many hospitals are developing centers of excellence (COEs). These operating units are organized around a particular clinical service area or line of business so as to be competitively distinct. For example, COEs often are created around women and children's health, cardiovascular care, oncology, or muscular-skeletal services.

The approach at Laverne Hospital (a disguised name), was no different. Laverne, a 521-bed. nonprofit community hospital, with some 750 physicians and surgeons on its active medical staff, had recently broken ground for a multi-million dollar, state-of-the-art muscular-skeletal COE.

"We needed to make a move in orthopedics," explains a senior manager at Laverne. "The product line is in demand, and a lot of procedures can now be done in an outpatient setting, which makes it easy for the for-profit folks to steal business from us."

Because so much of the success of the muscular-skeletal COE depended on the effectiveness of the operating rooms, Laverne had spent the two prior years undertaking some significant reforms in the management of its ORs. Indeed, due to the complexity and interdependence of the OR, the hospital's senior management team had worked closely with its surgical and anesthesiology staffs to address such issues as OR block time andthroughput, quality of surgical procedures, and collaboration among the surgeons, anesthesiologists, and members of the OR nursing and technician staff. This groundwork, greatly enhanced the chances of success for the new COE.

**Structure**

At Laverne, as in many hospitals, each COE had bottom-line responsibility, such that OR revenues and costs played a significant role in the financial performance of many of the COEs. As a result, a major structural issue in developing the COEs concerned the relationship among the center's managers, the OR managers, and the anesthesiology and surgical staffs. Two structural issues stood out as particularly important: financial accountability and dual lines of authority.

*Financial accountability*. When senior managers designate a COE as a profit center (thereby holding it responsible for both revenues and expenses), they also need to redefine the OR. Instead of its historical designation as a profit center for the hospital, the OR becomes a profit center *within* each COE. Thus, when a COE is designated as a profit center, it either needs to run its own suite of ORs in a profitable manner (as was planned for Laverne's muscular-skeletal center) or "purchase" services from the hospital's OR suite while simultaneously being assigned the applicable revenues (as was the case at Laverne prior apart from the muscular-skeletal center). Although the former is somewhat easier than the latter, in either case, each COE has responsibility for a portion of the OR's revenues and expenses.

*Dual lines of responsibility*. In almost all hospitals there are dual lines of responsibility:

administrative and clinical. Both lines make decisions that can affect OR costs and hence the profitability of a given COE. For example, the OR manager typically is a member of the hospital's administrative staff, and is responsible for the smooth and efficient running of the ORs. To be successful, this manager needs to be able to work collaboratively with the chiefs of surgery and anesthesiology.

One area where dual lines of responsibility frequently collide is around block time in the OR—the time assigned to a single surgeon or a group of surgeons during which they are able to perform multiple procedures. To make the OR as efficient as possible, many hospitals offer block time to busy surgeons or surgical groups, not only to make scheduling easier and predictable, but also to lessen the time between operative procedures. When used efficiently, block time provides a high level of surgical throughput.

Block time can also be the source of much contention, however, especially when a surgeon or a surgical group assigned to a block does not fully use all the available time. The chief of surgery wants to ensure that the surgeons maintain control of their OR time, whereas the administrative director of the OR wants high capacity utilization to ensure financial viability. Under these circumstances, developing mechanisms to resolve block-time and similar issues can be quite difficult, even when an OR is unique to a particular COE. At Laverne, prior to improving the OR's efficiency, pressures regarding block time had become so intense that some surgeons, wishing to keep their slots open, were scheduling non-existent patients, thereby preventing other surgeons from using the time. As a result of this and other similar problems, Laverne's ORs were operating at only about 55 percent of capacity prior to the improvement initiative.

**Information**

Informational needs tend to change when a hospital adopts a COE strategy. A hospital typically needs to make modifications to both its accounting system and its management reporting system.

*Accounting*. When it moves toward a COE strategy, and when each COE is a profit center, a hospital needs to ensure that its accounting system provides the COE's managers with adequate information on OR revenues and costs.

The needed changes require shifting away from the traditional full-cost accounting methodology, with its payer-driven overhead allocations, to a methodology that links OR costs (and revenues) to the COEs that control them. Establishing this link requires developing a set of transfer prices, so that those COEs that do not have their own ORs can "purchase" OR time at a given hourly rate. The same approach can be used for a variety of other centrally-provided services, such as radiology, laboratory, housekeeping, and dietary. Indeed, if a COE strategy is to be successful, these services must be purchased by, rather than allocated to, each COE. Moreover, for those areas where there is a flow of revenue (such as in the OR), each COE must be assigned its fair share of that revenue.

Even when a COE has a dedicated OR, transfer prices are needed to compute the financial performance of individual surgeons or surgical groups. This is important because surgeons generally are not accountable for the costs associated with the operating room. So if an orthopedist decides to use the most expensive prosthesis, the cost does not affect his or her bottom line but it does affect the financial performance of the COE.

*Management reporting*. Successful management of the OR in a COE model also requires providing each COE's senior management team with a regular flow of reports concerning the OR's performance.

Two years prior to breaking ground for its muscular-skeletal COE, Laverne had implemented an information system that tracked each patient's progress from admission to discharge from the recovery room. This system generated a wide variety of reports related to OR utilization, costs, and revenues. One report showed the amount of time used both within and outside the designated block for each surgeon or surgical group. Another showed block utilization for each day of the week. A third report, shown on page 8, displayed OR use by individual surgeon. In all, Laverne's information system had the capacity to produce a report that could answer almost any question that might arise.

"Docs are scientists," says Laverne's CEO. "Without good data, there was a lot of finger-pointing, especially between surgeons and anesthesiologists. When we got the data, we posted

the reports in the surgeon's lounge, and when they saw that some of the delays were within their control, they started to change."

During this time, the hospital also began tracking its OR costs against revenues. In doing so, it discovered that OR revenues didn't cover costs for some procedures, which subsequently led to adjustments in pricing.

Overall, over a period of about two years, Laverne went from 55 to 85 percent OR utilization (Note: Since the hospital holds back one of its 20 ORs for emergency trauma cases, the best it can do is 95 percent.) In addition, the OR's financial contribution to the hospital's bottom line went from zero to about $15 million, and growth in OR volume rose from about 3 percent per year to double digit rates of increase.

**Behavior**

Initiating changes in OR policies and procedures is no small behavioral undertaking. If OR financial performance is to improve under a COE structure, senior management must make a fundamental change in the hospital's culture. In addition, it may need to establish or restructure several committees to reflect the new information availability, and to allow the organization to deal effectively with the dual lines of authority.

*Cultural change*. Improving OR financial performance requires a fundamental shift in the basic assumptions that govern decision-making. A hospital's senior management must be prepared to shift the decision-making focus from one based on politics and power to one based on objective information and collaboration. At Laverne, the environment changed from finger pointing to a focus on performance and personal accountability.

"We have moved from a culture of anecdotes to a data-driven culture," says Laverne's chief medical officer. "At first, the docs didn't trust the data, but over time, with explanations, they not only have come to trust the information, but they actually own it. Now, there are no questions about why cases don't start on time—we have the data."

*Committee structures*. OR scheduling is one of the most contentious areas that a hospital must manage. Simply having better data is not enough to avoid the inevitable conflict between

managers and physicians, between surgeons and anesthesiologists, and among the surgeons themselves. To deal with these conflicts, most hospitals have a permanent OR committee that comprises all key players and that meets regularly..

At Laverne, the OR Governance Committee played this role. Initially, the committee had 25 members, with participation largely based on the knowledge that opinions or politics would dominate the decision-making process. As Laverne's CEO recalls, "Everyone wanted to be on the committee since everyone had an anecdote to contradict someone else's anecdote."

Over time, as the surgeons recognized that data would serve as the foundation for decisions, and as they developed trust in the data, the committee's membership shrank to seven. Confidence grew in data-based decision making that involved issues such as surgeon arrival time, anesthesiologists arrival time, "wheels in to wheels out" time, actual procedure time, and time spent preparing the OR for the next procedure. In the words of Laverne's CEO, "anecdotes are now discouraged as useless data."

"The committee has taken a lot of emotion out of OR issues," says Laverne's chief medical officer. "The committee also can decide what is an unreasonable resource. For example, should a procedure use one technician or two? The committee has taken a fair-minded, high road to approach issues like this, and anxiety has dropped considerably."

**The Future**

Hospitals that initiate efforts to improve OR performance in a COE environment do not obviate the need to make difficult decisions; instead,\the nature of those decisions changes. Politics and posturing tend to take a back seat to data, meaning that the decision-making focus shifts to a variety of difficult but important matters concerning effective management of the ORs. At Laverne, the OR Governance Committee has begun to focus on the following issues:

*Case priorities*. The hospital's ORs are very close to capacity, and, apart from the muscular-skeletal COE, no new ORs are planned for some time. Under these circumstances, how should the hospital determine priorities for OR use? If the issue is the OR's financial contribution to a COE, should those cases with higher contribution margins be given priority?

*Decision makers*. If certain cases are to have priority, who within Laverne's dual lines of authority should decide on the priorities? Should it be the COE's vice president, the chief of surgery, the administrative director of surgical services, or someone else?

*Report modifications*. Once the above decisions have been made, will the information system's reports need to be modified to provide appropriate information to the responsible individuals. If so, what kinds of modifications might be needed?

*Cost-reduction initiatives*. Independent of case-mix priorities, has the hospital obtained all of the cost reductions it can achieve in its ORs, or are there some remaining possibilities? If so, what are the potential sources for the additional cost reductions, how can the reporting system assist in identifying these potential areas, and who should have responsibility for achieving them?

*Compensation System*. How, if at all, should Laverne modify its compensation system so as to encourage good financial performance without creating an incentive to compromise the quality of care? Should administrative staff receive bonuses? Should members of the OR teams receive bonuses? If so, how should the bonuses be structured so as to reward people appropriately?

As the above list indicates, a hospital that has moved beyond political posturing and other dysfunctional approaches to managing its OR has not avoided difficult decisions. Rather, the decisions have become more strategic in nature and are made in a data-driven environment. The result is a focus on blending financial performance with a variety of other considerations in a culture where all interests are aligned and where decision-making is collaborative and win-win, rather than zero-sum.

**About the Author**

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## EXHIBIT 1. Sample Surgeon Cost Comparison Report

**Procedure Category:** Arthroscopy, Shoulder **Date Range:** 10/8/2002 **To:** 12/27/2002

| SurgCode | # of Cases | Avg Item Used | Total Item Used | Min Item Used | Max of Item Used | Average Charges | Total Charges | Min Charges | Max Charges | Average Costs | Total Costs | Min Costs | Max Costs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surgeon_0133 | 6 | 45.83 | 275 | 40 | 53 | $2,286.65 | $13,719.91 | $926.31 | $3,595.76 | $967.35 | $5,804.07 | $378.36 | $1,391.06 |
| Surgeon_0089 | 3 | 43.00 | 129 | 38 | 46 | $1,857.58 | $5,572.74 | $1,664.27 | $2,203.08 | $772.87 | $2,318.62 | $667.17 | $938.92 |
| Surgeon_0016 | 18 | 58.89 | 1060 | 23 | 78 | $1,824.93 | $32,848.71 | $282.88 | $3,511.17 | $760.40 | $13,687.18 | $113.42 | $1,539.31 |
| Surgeon_0022 | 21 | 45.19 | 949 | 17 | 68 | $1,767.41 | $37,115.59 | $327.13 | $4,156.79 | $727.08 | $15,268.78 | $136.39 | $1,740.93 |
| **Total:** | **48** | **48.23** | | | | **1934.14** | | | | **806.93** | | | |