# The Modern Operating Room

## In perioperative paradox, OR draws both big cash and big cost

By Curt Werner

In addition to serving as the headquarters for some of the finest life-saving medicine in the world, the operating room is also a place of great paradox. On one hand, the OR is a hospital's reigning revenue resource, credited with bringing in more hard cash than just about any other department. On the other hand, the OR is also the undisputed king of cost. After all, expenses budgeted for staffing and supplying the typical surgery suite can be extraordinary and most large hospitals have multiple suites to consider.

At ground level, where materials management professionals seeking to make a difference in the OR look for ways to tread lightly on sometimes vast egos and are wont to skip quickly over hospital politics and pitched turf battles, change can come slowly, and only in carefully orchestrated product segments.

But materials managers specialize in supply chain improvement and with reimbursements often lagging behind clinical realities, fine-tuning an OR's supply chain is clearly a path that hospitals need to take, if they haven't already, and materials management can be a source of great relief. However, as non-clinicians, materials management professionals are all too often shunted aside. It's no wonder that at least one OR consultant blames a misalignment of titles and a clash of internal corporate cultures for creating rivalries between materials management and OR managers that can stymie a hospital's ability to get the most out of OR performance.

"Surgery is still a money maker," says the consultant Alison Flynn, associate vice president and director for Nexera Consulting, a New York-based affiliate of the Greater New York Hospital Association. "But to what extent depends on a hospital's vision. Since the OR carries both large expense and large profit, there should be more focus from the C-suite to align materials and clinical management. The two cultures are very different, one being clinical the other financial. Hospitals need global value analysis committees under the subset of product evaluation that include clinical and non-clinical managers. But in any case the first step has to do with improving communications."

Flynn calls on vendors serving the OR to step forward and help. "The Golden Rule is that every vendor has to be on board with solutions that add to high quality care and efficiency. Their role does not end simply with the cost of the product." Flynn contends that in highly competitive markets vendors should be compelled by hospitals to offer relevant extras to their product programs. These might take the form of educational components, free freight or at least freight at reduced cost, beta testing of new products and up-front price reductions for such new technology.

"Everything is a negotiation," she says. "But no vendor wants to lose business and every vendor wants to differentiate themselves, so remember that it is easier to negotiate with your current vendor."

Flynn says that help in reducing costs in today's OR is coming from what had been an unlikely source: surgeons. "Physicians are different today," she says. "More have MBAs and with that have an acute awareness of price points and in their role in their hospital's survival." Earlier generations of surgeons were, of course, notorious for their general reluctance to participate in narrowing their choices of physician preference products, an attitude that costs hospitals plenty. Now, says Flynn, more orthopedic surgeons than before, for example, are agreeing to such cost-cutting measures as patient-demand matching, programs that seek to

implant adequate but less expensive orthopedic devices in older patients who clearly do not need the significantly higher-cost items better suited to younger, more active patients. "Both patients and physicians have become more educated on the benefits of patient-demand matching," she says.

To help counteract resistance from surgeons to such programs, Flynn says that so-called "shelf pricing" can be used to keep physicians happy by negotiating with vendors to maintain some stock of selected products. But, she warns, surgeons should know that "vendors must meet certain price points for them to continue to use the products they were trained on."

There are some other programs that help hospitals cut OR costs in an era of diminishing reimbursements, says Flynn. In particular she mentions an enlarged but carefully choreographed use of custom procedure packs along with the utilization of third-party reprocessors to wring out more usage from single-use devices. "Custom packs are a great idea," she says, "but they are only as good as the pack. Contents must be monitored on a monthly basis and par levels must be checked and watched for small changes that can create waste. Clinicians must participate in creating the packs, but all of this can be done and can provide great value."

Reprocessing, once a pariah in many hospitals, is steadily gaining favor and most hospitals today are using reprocessed items to at least some degree, Flynn says. "This is a potential money-saver," she insists. "The FDA has certified reprocessors and it's now a low-hanging fruit." She cautions, however, that the best way to introduce reprocessing to a hospital is to "educate staff and use a controlled, systematic rollout."

## From suppliers to surgeons, OR profit just a thin line away

Streamlining product movement can be an important way for a hospital to carve more profit out of its OR department. In fact, a white paper from Cardinal Health says that the supply chain is the key to increasing OR profitability. Smoothing the path products take from suppliers to surgeons, the report points out, involves properly managing the processes required to purchase, store, prepare and dispose of supplies used for surgical procedures.

As every experienced materials management professional well knows, product price is often less than half the "true cost" of acquiring those supplies. Each time a product is handled prior to use in surgery raises the actual cost of those supplies. Cardinal lists those "true costs":

- Storage space needed in various departments
- Assembly of supplies for surgery
- Labor costs for managing supplies
- Multiple purchase orders for supply acquisition
- Accurate patient billing for supplies
- Restocking unused supplies

"Supplies must arrive at the OR in a timely manner and properly bill to the patient," says the report. "Often supplies arrive in the OR requiring additional preparation and processing. With the high cost of individual supplies used in most procedures, there is a significant likelihood of lost charge capture, further degrading the operating profit of the OR."

Cardinal asserts that supply consolidation and automation "can overcome the challenges of handling supplies, resulting in a highly efficient supply chain that returns greater profits to the OR." Supply consolidation is defined as the grouping of many single items into larger packages or kits for better supply chain efficiency, while supply automation is defined as the use of technology to streamline inventory, consumption, charging and ordering procedures. According to Cardinal, a highly efficient supply chain can:

- Reduce the actual cost of supplies
- Decrease the labor needed to manage the supply chain
- Increase charge capture
- Enhance process management
- Increase staff morale
- Improve quality of care
- Free staff to spend more time with patients
- Increase physician satisfaction

"A supply consolidation vendor should provide experts to consult in clinical and supply management OR processes," says the report. "The vendor should study the OR's pattern of consumption, observing how items are used and assembled. Based on an on-site assessment, the vendor should estimate the size and scope of the consolidation program and provide preliminary financial and operational benefits."

And when looking into supply automation, Cardinal, which sells its successful Pyxis line of supply automation equipment, says hospitals should consider security, the flexibility of the technology, open access to supplies, radio frequency, GUI-based (touch-screen) management and mobile access. FM

## Surgery stats reveal dramatic shifts in patient care

A report from the Centers for Disease Control points out that trends in hospital utilization show that from 1970 through 2003, the percentage of inpatients hospitalized for eight days or more decreased significantly while those staying three days or less significantly increased. In 1970, 33% of all inpatients were hospitalized for eight days or more compared with just 16% in 2003. What's more, the percentage of inpatients staying three days or less increased to 57% in 2003 from 36% in 1970.

In 2003, the CDC reports that there were an estimated 34.7 million inpatients discharged, excluding newborn infants, from non-federal short-stay U.S. hospitals. The discharge rate was 1,199.7 per 10,000 population — 977.3 for males and 1,413.7 for females. Males had an average length of stay of 5.2 days compared with 4.6 days for females.

The discharge rate per 10,000 population ranged from 1,003.3 in the western states to 1,337.1 in the northeast region. The average length of stay ranged from 4.4 days in the midwest to 5.5 days in the northeast region

Also from the National Center for Health Statistics are figures breaking down some of the 43.9 million inpatient procedures performed in 2003, the latest year for which statistics are available. The NCHS figure for total inpatient surgeries rose from 40.3 million in 1996.

- Arteriography and angiocardiography using contrast material: 2 million
- Cardiac catheterizations: 1.3 million
- Endoscopy of small intestine with or without biopsy: 1 million
- Computerized axial tomography (CAT scans): 867,000
- Diagnostic ultrasound: 866,000
- Balloon angioplasty of coronary artery or coronary atherectomy: 664,000
- Hysterectomy: 615,000
- Reduction of fracture: 643,000
- Endoscopy of large intestine with or without biopsy: 615,000
- Insertion of coronary artery stents: 574,000
- Coronary artery bypass graft: 467,000
- Total knee replacement: 418,000
- Total hip replacement: 220,000

Meanwhile, a recent report from Medtech Insight, Newport Beach, Calif., predicts that more than 38 million surgical procedures will be performed in this country by 2012. In the 2005 report, titled *U.S. Surgical Procedure Volumes*, the researchers said that most of the procedures will take place not in hospitals but in outpatient or freestanding health care facilities.

Medtech pegged the current total number of open and minimally invasive surgical procedures and device implantations in the U.S., including those used in cardiovascular and thoracic, orthopedic and spinal, and cosmetic surgery, among other categories, at 28.5 million in 2004, contradicting the figures released by the federal government. FM ⇧

At Milwaukee's Columbia/St. Mary's Hospital, David Skinner is tackling supply chain issues in the facility's OR department and making some marked progress. Columbia/St. Mary's, part of a four-hospital network that carries a solid reputation for quality orthopedic surgery, recently moved its procurement responsibilities to San Francisco-based Broadlane Inc. through its affiliation with the Catholic health system Ascension Health's move away from Chicago-based Consorta Inc.

Skinner, who serves as the hospital's Surgery Materials Manager, is only one year into his current position. However, as a 25-year materials management professional with 39 years at the same facility he is no stranger to cost-saving strategies. For instance, he sits on a Surgical Services Value Analysis Committee organized through Ascension that meets each month to consider improvements in product standardization and finance. "We try to maintain control over product coming in to our hospitals," he says. "We try and put some logic to the process and avoid duplication."

With orthopedics as its strong suit, Skinner and others have worked hard on savings in orthopedic implants, a product category he says is "bigger than salary expense." Improved contracts have helped and negotiations continue. Five vendors hold a commanding 90% share of the hospital's implant business, so there is a move afoot to trim that vendor number as well as concurrent work being done on introducing new technology. But time has become a factor in completing every possible project. "Everyone is so busy that new technology has been hard to keep up with," he says. FM ⇧