## **HOSPITAL REVIEW**



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# 7 Actionable Strategies That Helped a Baltimore Hospital Beat OR Stagnation and Increase Case Volume 26 Percent in One Year

By Lee A. Hedman

A strong operating room is critical to every hospital's bottom line. In top organizations, perioperative services account for 68 percent of revenue. Not surprising, the reverse is also true. When a hospital is struggling financially, it is nearly always the case that the OR is under-performing.

What causes poor OR performance? One issue stands out: low efficiency. Inefficiency in the OR leads to low volume and can also contribute to poor quality. It will soon become an even bigger problem, as value-based payment shrinks margins and raises quality expectations.

The good news is that efficiency problems are solvable – and effective interventions can quickly produce outstanding results. Recently, my colleagues and I worked with Greater Baltimore Medical Center to turn a stagnating surgery department into a strong revenue driver.

#### **Facing Up to Declining Performance**

GBMC has traditionally operated one of the busiest ORs in Maryland. In recent years, however, the 25-room department has struggled with low efficiency.

The numbers paint a challenging picture: More than 8 percent of cases were cancelled on the day of surgery, and only 67 percent of first cases started on time. In addition, downtime between cases was up to 75 percent longer than benchmark. These inefficiencies cut into productive OR time, leading to an overall primetime utilization rate of only 62 percent.

Low utilization led to high costs and low margins. It also contributed to physician dissatisfaction, with many surgeons unable to book OR time despite low overall volumes. Surgeons were also dissatisfied with service levels. These issues led to decreasing case counts, with recent year-over-year volume declines of up to 7 percent.

When OR performance hits levels like that, it is very common for clashes to erupt between physicians, nurse managers and administrators. Thankfully, GBMC decided to take positive action. Following are seven strategies that helped GBMC turn around OR performance and achieve strong volume growth.

### 1. Create a "Board of Directors" for the OR

In most hospitals, nursing leaders manage day-to-day OR operations but have little authority to drive transformative change. At the same time, surgeons and anesthesiologists have very little say in how their work environment is structured. These familiar dynamics were in play at GBMC. Since no one "owned" surgical services, no one could take responsibility for improving department performance.

GBMC solved this problem by establishing a Surgical Services Executive Committee to govern the OR. The SSEC brings together all the stakeholder groups that have an interest in a successful OR – surgeons, anesthesiologists, nurse managers and hospital executives. It functions as a hospital-sponsored "board of directors" for perioperative services. With all stakeholders engaged and full authority to enact change, the SSEC set about transforming the OR into a high-performing organization.

### 2. Set Clear OR Policies – and Enforce Them

A major symptom of an OR leadership vacuum is a lack of enforced rules. With the SSEC in place, surgical services leaders at GBMC were able to develop consensus-based policies and standards designed to support operational efficiency.

The first priority was to create strong policies governing the OR schedule. First, the SSEC replaced inefficient 4- and 6-hour schedule blocks with blocks of 8 hours or longer. Longer blocks reduce turnover waste and allow surgeons to increase overall productivity. Second, the committee allocated all block time to individual surgeons (not groups or specialties). This helped establish personal accountability for utilization. Third, case cancellation

policies were tightened, with the addition of strict lead time expectations. Finally, the SSEC established a policy requiring surgeons to maintain 70 percent utilization to retain ownership of their block.

The committee enforced block time rules through quarterly reviews, probationary periods and other mechanisms. Holding surgeons accountable for block utilization help to reduce wasted time. In addition, policies governing early arrival and preop work supported efficiency by ensuring timely starts.

#### 3. Build Efficiency into the Front End

In many ORs, patients often arrive for surgery with incomplete charts and unmanaged medical conditions. At GBMC, incomplete prep contributed to high cancellation and delay rates. SSEC leaders realized that the key to solving these problems was to strengthen preoperative processes.

Their first step was to redesign the Perioperative Testing Center. Anesthesia took the lead on developing evidence-based grids and pathways for pre-surgical preparation. These PTC tools spell out required pre-op tests and patient management based on comorbidities, procedures and medications. For example, if a patient has cirrhosis, PTC staff use the tools to:

**Order labs:** All cirrhotic patients have a complete blood count, a comprehensive metabolic panel and anticoagulant labs.

**Act on results:** If the CMP shows BUN greater than 45 or creatinine above 1.7, the labs tool directs PTC staff to fax the results to the patient's surgeon and primary physician.

**Coordinate medications:** If the patient is on metformin, for instance, the dose is discontinued a full 24 hours before surgery.

The SSEC also replaced the OR's chaotic scheduling process with a web-based system that captures accurate case information up front. Once the changes were in place, OR leaders created an information packet to educate surgeons and primary physicians on new PTC requirements and

scheduling processes.

#### 4. Implement "Management by Huddle"

New PTC and scheduling systems helped GBMC capture complete patient and procedure information ahead of surgery. The next step was to create a management system for leveraging this information. The SSEC's solution was to institute a "daily huddle."

The daily huddle is a brief operational meeting that takes place every afternoon. Participants include representatives from anesthesia, OR nursing, sterile processing and other key departments. During each 20-minute huddle, the team examines upcoming surgery patients using a rolling 4-, 3-, 2- and 1-day system. They ensure all labs are complete, comorbidities are under control and medication management is on track. They also scrutinize the schedule for any issues that could slow down patient flow. For instance, they might move diabetic patients to earlier time slots to facilitate glucose control. Or they might schedule all left-side knee replacements to follow each other in the same room, minimizing turnover time.

Stronger PTC processes, coupled with careful management by the daily huddle, have helped ensure patients arrive at the OR completely prepared for their surgery. Minimizing last-minute problems has helped create a smoother daily schedule that supports higher utilization.

### 5. Tap the Power of Anesthesia Leadership

Anesthesiologists offer significant expertise in OR quality and efficiency. But in most ORs, this expertise goes largely untapped. Hospital executives at GBMC changed this dynamic by inviting the anesthesia department to take a larger role in OR leadership.

The SSEC began by appointing an anesthesiologist to serve as medical director of perioperative services. This physician provided critical leadership on several efforts to redesign OR processes. As described above, anesthesia led the development of pre-surgical pathways and standards for testing and patient management. The department also guided efforts to standardize hand-offs, strengthen safety checklists, institute pre-operative screening for obstructive sleep apnea, and establish real-time data reporting.

These initiatives not only increased safety, they improved overall efficiency by controlling the factors that lead to case cancellations and delays.

### 6. Use Manufacturing Techniques to Create a "Future State" OR

Most ORs struggle with poorly designed processes and staff structures that waste time. At GBMC, inefficient processes created long average downtimes between procedures – up to 53 minutes for inpatient surgery.

Performance improvement teams composed of managers and frontline staff redesigned room processes and workflows. To do this, they borrowed efficiency principles perfected by manufacturers such as Toyota.

For instance, they cut minutes out of turnover by replacing sequential tasks with parallel processes. Some room tear-down steps can be initiated while the surgeon is closing. That lets clean-up start earlier, allowing staff to set up for the next case in a timelier manner.

Supply management was another focus. Previously, the circulating nurse might leave the OR multiple times to retrieve supplies. Redesigning in-room storage and other inventory areas saved time and improved service for surgeons.

Designing and implementing a "future state" process map for the OR helped cases run more smoothly. Within months, the average turnover time for all procedures (inpatient and outpatient) was reduced to 31 minutes.

### 7. Understand the Critical Role of Sterile Processing

Effective sterile processing standards are critical to OR efficiency and safety – for patients as well as for hospital employees. In most hospitals, however, central sterile processing receives little leadership attention. At GBMC, sterile processing workflows and management processes needed improvement.

The SSEC addressed these issues by sponsoring a reorganization of the sterile processing department. The first step was to bring in interim leadership to identify department problems and establish effective systems.

Over several months, the interim leader realigned SPD processes – from decon-

tamination and sterilization to tray assembly and storage. This involved improving SPD guidelines, enhancing staff education, hiring additional team members, establishing accountability and putting a new management structure in place. Specific interventions included establishing oversight for endoscope reprocessing and better systems for monitoring quality events. Overall, the initiatives have helped SPD develop into an efficient and effective team. As a result, instrument set reliability has increased in terms of both accuracy and readiness for surgery.

### Results: Greater Efficiency, Dramatic Turnaround in Volume

These seven strategies – from multidisciplinary governance to process redesign and enhanced management systems – had a measurable impact on OR efficiency. In less than six months the first-case ontime start rate increased from 67 percent to 75 percent. Together with improvements in turnover time and other measures, these efficiency gains increased OR utilization from 62 percent to 73 percent.

Greater efficiency has also had a strong impact on surgeon satisfaction. Thanks to the new block time system, surgeons have reported little trouble scheduling cases. In addition, better schedule flow means they are more able to have highly productive days in the OR. And as payers increasingly watch postsurgical outcomes, GBMC's enhanced pre-surgical optimization and quality initiatives are setting the stage for strong performance under value-based payment.

Overall, improvements in efficiency and surgeon satisfaction have driven strong gains in case volume at GBMC. Between 2015 and 2016, OR volume increased 26 percent. This robust growth in surgical services is helping to drive stronger financial results for the entire organization.

Lee Hedman is executive vice president of Surgical Directions. Ms. Hedman and colleague Jeffrey Peters will detail more OR turnaround tactics during a "Lunch and Learn" session at the Becker's Hospital Review 8th Annual Meeting. Join us April 19th at 7a.m. for "Improving the Performance of Your Hospital's Most Important Service Line: Perioperative Services." Register today to reserve your seat - http://www.beckershospitalreview.com/conference/.



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