Bon Secours
St. Mary's Hospital

BUILDING A BETTER OR:
The Road to Successful Perioperative Transformation for Bon Secours St. Mary's Hospital

Introduction

Bon Secours St. Mary's Hospital is an acute-care facility with nearly 400 beds, located in Richmond, Virginia. According to Definitive Healthcare, the hospital's patient mix is about one-third Medicare, one-tenth Medicaid, and the rest primarily privately insured. Richmond median incomes and home values are below Virginia state averages,[1] and the Richmond population is probably slightly more price sensitive for healthcare services than average for the state. Hospitals such as St. Mary's must maximize efficiency and productivity to maintain margins in lieu of lifting prices.

Situation

The St. Mary's Hospital leadership team was increasingly concerned about the hospital's competitiveness compared with other local hospitals and newly built ambulatory surgical centers. St. Mary's had been experiencing a steady decline in surgical case volume, and it was under growing financial pressure as its market share declined.

Compounding this problem, the leadership saw indications of staff coordination issues. A steady stream of complaints plus outright increases in staff turnover was evident. The administration felt the perioperative department was not appropriately coordinated internally across its many functions, such as pre-op, OR, pre-anesthesia testing (PAT), nursing, surgery, and anesthesia. Surgeons voiced complaints about OR access, and the Central Sterile Processing Department (CSPD) was struggling to maintain appropriate quality standards.

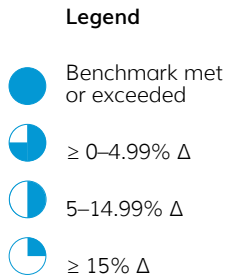
The hospital leadership team considered issuing an RFP to find a new anesthesia group that could shore up the perioperative processes. But the team first reached out to Surgical Directions to identify any less-drastic but impactful changes that could be made to address the hospital's issues.

Approach

Bon Secours engaged Surgical Directions to perform an assessment of perioperative services at St. Mary's Hospital and determine the depth of issues that needed to be addressed. The Surgical Directions team was asked to provide recommendations along with a phased timeline approach to optimize staffing levels for surgery, anesthesia, nursing, staffing, and sterile processing.

Surgical Directions began the assessment with detailed data analysis spanning operational, financial, and market reports. Results were compared with our extensive benchmark database to determine opportunities. The team employed a variety of advanced analysis tools, opportunity heat maps, best-practice staffing models, and other techniques to identify opportunities.

Metric	Custom Benchmark	St. Mary's Rating
Prime-time OR adjusted utilization	75% ≤ Utilization ≤ 85%	
Turnover time (room)*	30 minutes or less	
First-case on-time starts (FCOTS)**	≥ 90%	



*Turnover time (room)—wheels out$_{n+1}$ – wheels in$_n$
**FCOTS—no grace period

Figure 1: This benchmarking scorecard sample reveals one significant problem and two less-significant problems. This type of analysis is conducted for dozens of key performance indicators.

Additionally, the Surgical Directions team reviewed employee satisfaction surveys and other information highlighting cultural issues within the hospital and OR environment. The purpose of this data gathering and analysis was to gain insight into performance and key operating issues before conducting the on-site assessment. The client's key performance indicators were compared with best practices from Surgical Directions benchmarks for similar institutions to help identify potential areas of improvement (see Figure 1).

Following the analytical phase, the Surgical Directions team held a final conference with key hospital and OR leadership to review the preliminary findings and provide recommendations for improving perioperative efficiency. The Surgical Directions team worked closely with hospital leadership to glean insight into how the hospital could build organizational consensus on change priorities.

Findings

Jointly the St. Mary's and Surgical Directions team identified several opportunities for improvement:

- Boosting operational throughput
- Increasing OR prime-time access while balancing capacity with demand
- Establishing a collaborative governance structure
- Implementing a Co-Medical Director model
- Commencing block redesign and utilization maintenance
- Implementing an effective daily huddle
- Enhancing surgeon access and engagement
- Leveraging a growth strategy to increase case volume
- Increasing the engagement of proceduralists
- Leveling load staffing to align with surgeon block schedules
- Improving nursing and support-service engagement and retention
- Eliminating sterile processing issues—improving standardization, education, and turnover of instruments throughout the system

During the assessment, one-on-one interviews revealed that St. Mary's Hospital had an OR director who was very much engaged and supportive of change. At the same time, the anesthesia department was respected for its clinical skills but wasn't viewed as a valued partner with the hospital.

Senior leadership recognized the potential to achieve best-in-class status. However, surgical services were not organized to meet the needs of patients and surgeons. No effective perioperative governance structure existed, capacity was not optimally utilized, and systems were not in place to optimize patients' clinical outcomes from the point of scheduling through 30 days of post-operative care.

Recommendations

Assessment participants believed that the joint Surgical Directions and hospital leadership team prepared a workplan that would transform the perioperative department. The team worked in collaboration with an appointed multidisciplinary leadership committee to guide perioperative services from a fragmented, struggling department to a well-organized unit focused on patient care using a four-pronged approach: leadership development, collaboration, governance, and standardization (see Figure 2).

Figure 2: This overview summarizes the four-pronged approach to implementing transformational change.

In addition, the team recommended several long-term strategies:

- Create a new administrative-sponsored leadership body: the SSEC (see sidebar)
- Implement a surgical growth strategy
- Overhaul block utilization guidelines
- Redesign the block schedule
- Restructure service line coordinators
- Align staffing with demand
- Upgrade scheduling processes
- Improve the patient preparation system
- Standardize day-of-surgery processes in pre-op
- Modify perioperative processes to improve throughput
- Establish dashboard reports to monitor perioperative performance

The hospital proceeded with an engagement during multiple months dedicated to improving the CSPD. The off-site sterile processing facility handled reprocessing of instruments for all Bon Secours system facilities in Richmond.

What is a Surgical Services Executive Committee?

The Surgical Services Executive Committee (SSEC) is an administrative body comprising the leaders of the perioperative and surgical services affected by a change program. It provides critical governance oversight, helping to ensure the success of the overall program. Its scope of responsibility typically includes the following goals:

- Increasing surgeon satisfaction
- Improving OR performance
- Implementing tracking and analysis of quality metrics
- Enhancing efficiency
- Boosting profitability

Benefits

As the work continues through 2019, the hospital is carefully tracking progress against multiple key performance indicators (see Figure 3).

Operational Improvement Objectives

Metric	Goal	Baseline
FCOTS	80%	40%
Turnaround time (TAT)	30 minutes	34 minutes
Same-day cancelations	4%	8%
Case volume	200 cases	N/A

Figure 3: Team-defined operation improvement goals reflect significant improvement over the baseline observed during the analysis phase.

In addition to the central sterile work, the hospital—in conjunction with Surgical Directions—established multiple performance improvement teams (see sidebar), each with a charter to define success for its specific area and identify levers of change. Meanwhile, Surgical Directions analysts developed detailed reporting scorecards to evaluate the success of their part of the overall transformation program.

Performance Improvement Teams

Performance improvement teams (PITs) provide essential accountability and governance, defining goals for success in the following specific areas:

- Optimization of efficiency
- PAT and scheduling
- Anesthesia work group
- Sterile processing
- Nursing leadership
- Physician dashboards and scorecards

To date, progress has been significant:

- **Increased surgical volume:** The SSEC at St. Mary's has become a kind of high-functioning board of directors for perioperative services. Physician members—both surgeons and anesthesiologists working alongside senior hospital administration and nursing—have taken the lead in directing the transformation to a much more streamlined, consistent patient care system.

  This group completed the daunting challenge of implementing a comprehensive rebuild of the block system, which has improved both surgeon access and overall OR room productivity. The net effect of this effort was an immediate increase in surgical volume of more than 400 cases compared with the prior year.
- **Reduced cancellations:** The anesthesia department is working with scheduling, admitting, OR, pre-op, and others to redesign pre-surgery patient throughput. Collaborating closely with the surgeons' office staff members, this group designed and implemented a hospital-based system of scheduling and patient preparation that reduced variation, improved efficiency, and increased patient satisfaction. Although all the results are not in, a significant reduction in both 24-hour and day-of-surgery cancellations has been achieved.

- **Improved on-time starts:** The Efficiency PIT is working to improve FCOTS and turnover time by carefully designing parallel processes. This choreographed approach assigns members of the OR team, including anesthesiologists and surgeons, clearly defined roles and time expectations. The results have been impressive. FCOTS has improved from around 40 percent to more than 60 percent in just a few months (see Figure 4).

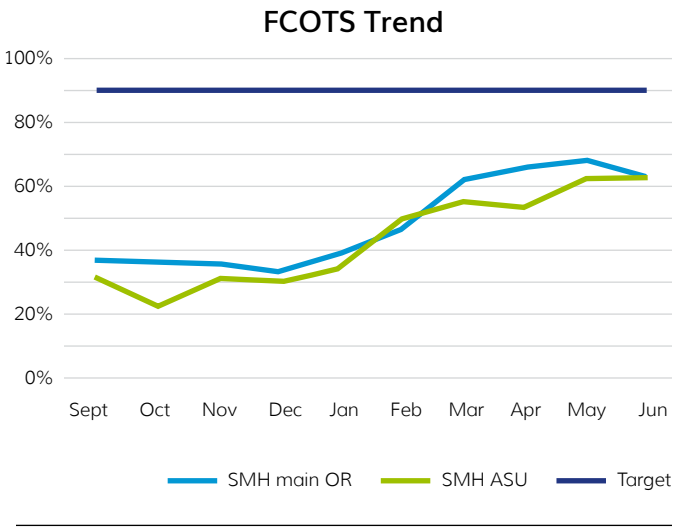


Figure 4: Steady improvement in FCOTS occurred during the implementation phase.

Improving frontline operational surgical services management was facilitated by a 30-minute daily huddle conducted at 13:00. This huddle is attended by representatives of units involved in preparing the patient for surgery. Proactive schedule and patient management, conducted by working closely with the surgeons' offices, significantly improved throughput, reduced cancellations and delays, and increased both patient and surgeon satisfaction.

- **Reduced central sterile errors:** The CSPD has made great strides in monitoring and reducing processing errors. Working closely with OR staff to audit errors, the CSPD team reduced tray errors to less than 0.20 percent—a reduction that helped increase OR staff and surgeon satisfaction attributed to very few cases being delayed because of processing errors.

Conclusion

St. Mary's has achieved significant progress, but the transformation work will continue throughout 2019. Moving from a traditional volume to a value-based system will require extensive ongoing collaborative effort from physicians and the hospital. Robust analytics can support good decision-making and help drive this change. Additional benefits are anticipated as the improvement work continues.

[1] City-Data.com. Retrieved from www.city-data.com/city/Richmond-Virginia.html.