Creating a Perioperative Partnership for Operating Room Managers

How Anesthesia Leadership Can Help

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“Operating room (OR) managers play a critical role in healthcare. They endure the day-to-day challenges of managing perioperative services in an effort to create the safest, most productive, and most efficient OR. A strong perioperative partnership with anesthesia leadership lends support to OR managers so they are not alone in meeting the high demands of the position.

There are high-risk responsibilities associated with OR management that are similar to those required of airline pilots. During an investigation into commercial airline accidents, the aviation industry discovered an essential link between teamwork and performance.¹ Medical researchers applied lessons learned from the aviation studies to assess teamwork in the OR, and found a similar connection.²

To run smoothly, the OR requires a team of healthcare professionals working in a collaborative environment. This white paper reviews the challenges of OR management, the benefits of developing a perioperative partnership with the anesthesia team, and the key attributes that make the best anesthesia partner.

**Challenges of OR Management**

OR managers and anesthesia leadership share three common goals – delivering high-quality healthcare, running the operating theatre efficiently and productively, and maximizing revenue and income while minimizing cost. A breakdown in any of the three phases of perioperative care (pre-, intra-, and postoperative) puts those goals at risk.

Three factors have significant influence over the attainment of OR management goals:

- The healthcare team
- The regulatory environment
- The quality improvement program

**Healthcare team**: Effective management of perioperative care depends on the cooperation and teamwork of the OR’s surgeons, anesthesia providers, and nurses.
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The OR team is like a three-spoked wheel. The wheel performs best when all spokes are intact and functioning properly. While the wheel may still function if one of the spokes loosens or breaks, it does not operate at peak performance. When surgeons, nurses, and the anesthesia department work as a collaborative team, it fosters a setting for peak performance.

Frequently, team members have different motivations and work styles. Long work hours, assertive personalities, and the inherent stress of the environment add to the OR manager’s challenges. Without respect and an understanding of roles and responsibilities, healthcare professionals can develop territorial agendas, resulting in a breakdown in efficiencies and quality of care.

**Regulatory environment:** A major factor that impacts OR management is the increasingly complex state and federal regulatory environment, in addition to existing hospital bylaws.

Patient safety and improved outcomes have always been a priority; however, health reform initiatives, such as the Value-Based Purchasing (VBP) program, add skin to the game with performance- and outcomes-based metrics impacting compensation.

The Patient Protection and Affordable Care Act continues a history of increasing focus on transparency, accountability, and efforts to quantify what “quality of care” means with measurable results.

The sheer volume of regulations underscores how important it is for perioperative providers to work together toward compliance and improved quality of care. A fractured team harms overall efforts, which puts the patient and the hospital at risk.

**Quality improvement program:** The Centers for Medicare and Medicaid Services (CMS) leads many quality improvement initiatives; however, most of these programs are products of a partnership with multiple healthcare organizations.

### Examples of Quality of Care Initiatives

**CMS**
- Value-Based Purchasing (VBP) – Process of care, patient experience, and outcomes measurements
- Inpatient Prospective Payment System (IPPS) – starting with Fiscal Year 2013, a reduction in diagnosis-related group (DRG) payments helps fund VBP
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) – survey used in VBP program
- Physician Quality Reporting System (PQRS) – incentive payments / adjustments for quality information reporting
- Agency for Healthcare Research and Quality (AHRQ) – Patient safety indicators

**The Joint Commission**
- Surgical Care Improvement Project (SCIP) – inpatient quality of care measurements

**Professional Accreditation**
- Professional societies, specialties, and subspecialties

**Hospital Bylaws**
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The National Quality Forum contains more than 700 endorsed quality measures.\textsuperscript{3} A myriad of reporting requirements for CMS, the Joint Commission, and other regulatory agencies challenges even the most organized healthcare teams.

Now more than ever, the strength of a hospital’s quality improvement program spells the difference between success and failure. Specialty provider groups and hospital, state, and federal regulatory requirements must integrate into a total quality management program.

Team members must look for continuous improvement in all three phases of perioperative care, including evidence-based medicine for patient safety, and compliance with hospital bylaws and regulatory requirements.

While OR managers have oversight, a strategic perioperative partnership strengthens perspective, clinical expertise, and process management.

**Benefits of Anesthesia Perioperative Partnership**

A perioperative partnership with the anesthesia leadership is an effective strategy for building support and teamwork. Strong anesthesia leadership delivers a comprehensive understanding of perioperative services that complements the duties of the OR manager.

The following describes the benefits of partnering with the anesthesia team to achieve optimal OR management.

**Perioperative Presence**

From preoperative evaluations to the patient’s recovery in the Post-Anesthesia Care Unit (PACU), the anesthesia provider is the one constant throughout the continuum of patient care. In a 2011 letter to CMS, the American Society of Anesthesiologists (ASA) explained that anesthesia is present in “virtually all care settings” in caring for the patient from an “overall perioperative perspective.”\textsuperscript{4}
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Executive surgical committees provide long-term strategy and guidance for perioperative services. However, rapidly shifting priorities in the OR setting require hands-on moment to moment decision making. The presence of the anesthesia leader in monitoring patient perioperative care produces an ideal opportunity for OR management consultation.

For example, the anesthesiologist’s preoperative evaluation may detect risks requiring intraoperative management, such as specific monitoring and positioning in the OR or special pain management techniques when the patient is transferred to the PACU. The anesthesia team’s presence across all perioperative settings allows for better risk management – improving quality of care, providing efficient and productive use of the OR setting, and ultimately delivering a greater return on the hospital’s investment.

The following benefits demonstrate how OR management can use the perioperative presence of the anesthesia team to their best advantage.

Coordinated Medical Care

The primary focus of OR management is to maximize the number of surgical cases while making optimal use of resources and minimizing associated costs. Operational challenges develop when there is a conflict in areas such as scheduling, insufficient staffing, bottlenecks in patient flow, or problems with equipment and materials.

Decisions made in a vacuum during perioperative care may have the unintended consequence of missing a number of variables that ultimately negatively impact overall efficiency and productivity. By coordinating medical care among surgeons, the anesthesia team, and nursing, OR managers share the responsibility, which leads to improved communication and better efficiency.

“Coordinated medical care is now an established value and goal... ‘Silos’ and ‘fragmentation’ are...the type of health care delivery system that policymakers seek to leave behind.”

“After the Supreme Court Decision: Anesthesiologists Must Proceed with Perioperative Care”
Becker’s ASC Review July 3, 2012
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Strong anesthesia leadership helps OR management experience the value of coordinated medical care.

**Improved communication:** The Joint Commission added improvement in staff communication as a patient safety goal after a study analyzing the root cause of more than 4,000 adverse events revealed communication breakdown as the most common factor.\(^5\)

On a smaller scale, another study monitored the intraoperative phase of OR care and identified 76 communication errors over the course of 150 hours of observation.\(^6\) The findings showed that communication failures resulted in inefficiencies and delays, and elevated tension among OR team members.

Figure 1 illustrates the results of the study.

![Figure 1. Observed consequences of communication failure in the OR](Source: Surgery (March 2011))

An effective partnership with the anesthesia department offers OR management improved physician-to-physician communication and accountability for managing physician issues affecting perioperative care.
Better efficiency: Reductions in reimbursement, staff shortages, and increased demands for care have hospitals looking for ways to do more with less. As a high-cost department, the OR is often the focal point for improvement. The challenge of OR management is to become more efficient and cost-effective while ensuring high patient and clinician satisfaction.

A 2012 study linked Massachusetts healthcare reform to an increase in inpatient surgical procedures. Because of an expected increase in the number of people with health insurance, there is speculation that the Patient Protection and Affordable Care Act (Affordable Care Act) could have the same effect.8

For many hospitals, expansion is not a viable option. The welcomed increase in surgery cases can quickly turn into an administrative and public relations nightmare.

The case study9 in Figure 2 (below) is an example of how one hospital’s coordinated medical care and collaboration improved OR efficiency while accommodating increased surgical volume and reducing staffing costs.

It started with the OR team’s anesthesiologist being named chairperson of the newly formed surgical services executive committee. As part of the committee’s efficiency efforts, it assigned the anesthesiologist the role of surgical services medical director.

**SITUATION**

- Hospital expanded service area from 7 counties to 10 over 9-year period
- Surgical volume increased by 49%
- OR capacity issues caused scheduling problems
- Hospital began scheduling late afternoon and evening surgeries
- Utilization volume decreased as surgeons worked around clinic hours
- Longer schedules increased staff overtime
- Dissatisfied surgeons, nurses, anesthesia, patients
- Hospital operating losses increased
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INTERVENTION

- Expansion not an option – looked for ways to improve utilization
- Created surgical services executive committee
- Anesthesiologist appointed chair of committee
- Six surgeons on committee – met monthly
- Focused on OR efficiency and service
- Addressed on-call coverage, block schedule, preoperative process
- Set key performance indicators, including first-case on-time starts, turnover times, cancellation rates, surgical infection rates, patient satisfaction

OUTCOME

- Case cancellations decreased from 3.8% to 0.01%
- Block utilization increased from 61% to 68%
- 70% of cases were scheduled during primetime hours (from less than 60%)
- Salary expense decreased 2.8% in OR
- Salary expense decreased 11% in pre-op clinic
- Average length of stay for surgical patients reduced by 15%
- Contribution margin per surgical case improved $383

Figure 2. Hospital case study on increasing surgical volume and decreasing revenue
Source: Healthcare Financial Management (2011)

As illustrated in the case study, the anesthesia team plays a pivotal role in OR management. Areas in which the anesthesia department assists in improving efficiency include the following:

- Scheduling, through the identification of resources and the implementation of scheduling policies, including block utilization
- Alignment of coverage with volume demand
- Assessment of surgical cases before opening another room
- Co-management of key operating measures, such as first-case on-time starts
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While any delay affects overall efficiency and productivity, few have a bigger impact than a delay in the start of the first case of the day. Using the aviation analogy, the late start causes a ripple effect in the same way that delays back up worldwide air travel.

The Advisory Board sets a 75th percentile benchmark for on-time starts for the first case at 59 percent. When allowing a five-minute grace period, the benchmark increases to 72 percent.10

Several studies illustrate the value of interventions in perioperative services to identify barriers to communication and better efficiency. In addition to providing medical direction in coordinated medical care, a perioperative partnership with anesthesia also has financial advantages.

Financial Return
The old adage “time is money” is readily apparent in perioperative care. Cancelled surgeries, interruptions to patient throughput, and extended length of stay are three examples of areas where hospitals incur financial hits through lost time and revenue.

Cancelled surgeries: Reducing the number of cancelled surgeries has a huge bearing on the hospital’s bottom line. One 2009 study of a single academic medical center estimated the facility’s loss of annual revenue from cancelled surgeries at nearly $1.5 million.11 Last-minute cancellations occur for different reasons. In this study, more than 30 percent of patients failed to show up for reasons that included transportation issues, confusion over the date of the procedure, and forgetting about the appointment.

While researchers were studying the reasons for cancelled surgeries, they made an interesting discovery: Patients who have preoperative visits with anesthesia providers are less likely to delay or cancel surgeries. Less than 4 percent of surgeries preceded by a preoperative visit were cancelled.12 Through the preoperative visit, the anesthesia team can intervene before costly delays or cancellations occur.

“Patients who have a preoperative visit with the anesthesia provider are less likely to delay or cancel surgeries.”

Tulane University School of Medicine
Patient throughput: Problems in patient throughput stem from multiple sources – inefficient processes, operational delays, or ineffective communication.

Patient flow involves both clinical and operational functions, and includes the following four elements:\(^\text{13}\)
- Events during the patient’s stay
- Precedence or sequence of events
- Duration of the events
- Resources required to perform those events

Not a single area of perioperative care is immune to patient flow inefficiencies. Anesthesia helps optimize OR throughput with the start of the preoperative testing function and an active presence through all perioperative phases, including consultation on add-ons for emergent or urgent surgical cases.

Length of stay: Future reductions in diagnosis-related group (DRG) reimbursements from healthcare reform add even more incentive for optimizing hospital length of stay.

In the 2011 letter to CMS, ASA identified how anesthesia interventions reduce length of stay, thereby generating cost-savings:\(^\text{14}\)
- Selection of appropriate candidates for surgery
- Optimal timing for surgical interventions to avoid rescheduling
- Reduction of complications, such as surgical or catheter-related infections, poor perioperative glycemic control, and postoperative nausea and vomiting
- Improved perioperative management of pain and anxiety

Financial challenges subject OR management to intense scrutiny. A hospital’s financial future will be largely influenced by how well perioperative services respond to the need for effective cost management and improved efficiencies in the OR.
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The right perioperative partnership helps the OR manager unite the team of professionals in achieving clinical and business objectives to attain OR excellence.

**Key Attributes for a Valued Perioperative Partner**

Some hospitals are fortunate enough to have strong anesthesia leadership in place. Other facilities seek anesthesia management companies to provide overall management and support. Whatever the situation, there are key attributes that OR management should look for when identifying the best perioperative partner.

**Leadership:** Effective anesthesia leaders offer support to OR managers by being present, assuming responsibility, and acting as team players. The strong leader serves as a buffer among the differing views of surgeons, nurses, and anesthesia providers, and is an effective medical director for perioperative care.

The complexity of managing the OR requires the multidisciplinary cooperation of surgeons, nursing, and the anesthesia team. An individual working alone is unable to achieve change in the OR; it takes a team with a common purpose and a commitment to success. The right anesthesia leader fosters a culture for success.

**Infrastructure:** The dynamic of perioperative care is one of change and quick decision making. The right anesthesia partner has access to an infrastructure that supports tracking, benchmarking, best practices, and the tools for making evidence-based medical decisions. Quality improvement measurements should integrate with the hospital’s program for total quality management.

**Transparency:** At the heart of a perioperative partnership is trust. Team efforts require total transparency in financial and operational data. The three-spoked wheel cannot function at peak performance if information is missing on the functioning of one or more of the spokes.
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**Accountability**: OR management has too many stakeholders for one entity to shoulder all of the responsibility. Effective anesthesia leaders recognize the need for accountability, not only in their own professional competence, but in their roles as strategic partners in perioperative care.

Anesthesia shares the full perioperative stage with the OR manager and offers the opportunity for a valued partnership. For all of the challenges that the OR faces today, the changes that lie ahead will increase them tenfold. A perioperative partnership is a sound strategy in preparing for whatever the future holds.

**About Somnia Anesthesia**

Somnia Anesthesia optimizes anesthesia services for healthcare facilities throughout the country by combining clinical excellence with unparalleled management acumen. Owned and operated by anesthesiologists since 1996, Somnia provides a turnkey, solutions-based approach to anesthesia management.

With an extensive in-house infrastructure and a single-minded focus on anesthesiology, Somnia builds and manages local anesthesia teams that consistently deliver the highest quality patient care, enhance operating room performance, increase revenues, and achieve full surgeon and patient satisfaction.
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References


9 Ibid


11 Bent, S., Mora, A., Russo, S., Pierre, N., Rosinia, F., Campbell, C., “The Financial Burden of Cancelled Surgeries: Implications of Performance Improvement.” Anesthesiology, Tulane University School of Medicine, New Orleans, LA, Tulane University School of Public Health and Tropical Medicine, New Orleans, LA.


14 American Society of Anesthesiologists (see n. 4).

Additional Resources


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