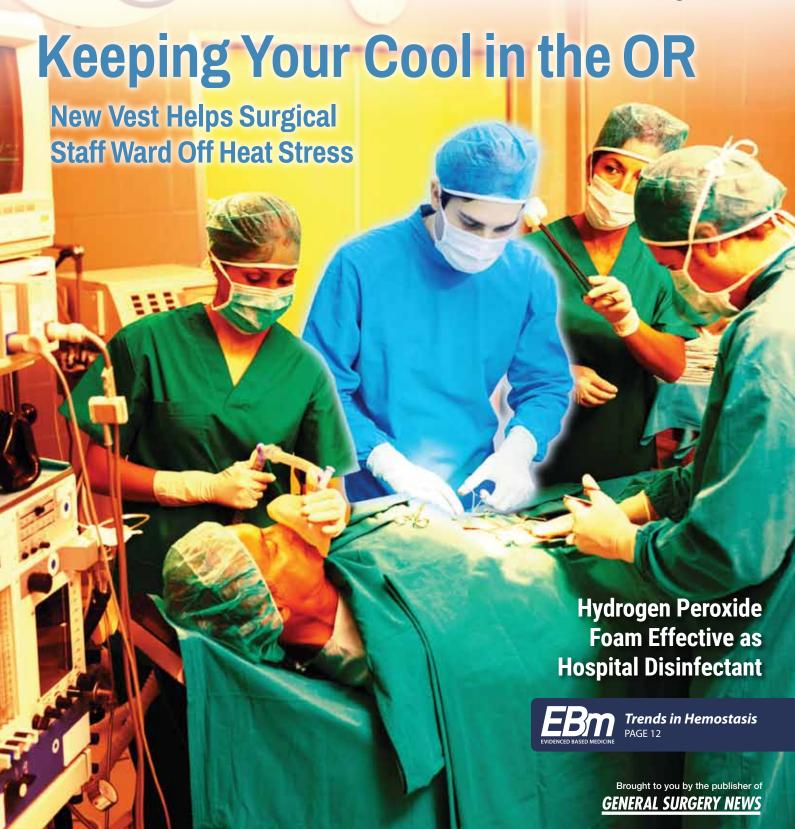
# Independent Source of News for Operating Room Managers, Supply Chain Professionals & C Suite

Volume 10 • Winter 2019

www.ormanagement.net





Case Study Examines One Hospital's Struggles and Details Path to Success

By DAVID TAYLOR, MSN, RN, CNOR, and BRIAN ARNDT, MBA, BSN, RN, CNML

A ccounting for more than half of a hospital's net revenue, the surgical service line is essential for long-term financial viability. Although the viability of other services depends on cost shifting from the OR, the surgery department can contribute up to 60% of a hospital's margin.<sup>1</sup>

Maximizing this margin goes hand in hand with improving patient flow. This requires getting patients from the point of admission to the point of discharge as quickly and efficiently as possible. At \$62 per minute, a 60-minute delay can cost a hospital \$3,720. Add in a turnover time of 30 minutes and now that's \$5,580. If this happens just four times a day, a hospital could be losing \$669,600 a month. Multiply that by a year and the loss could be in the millions.

It is also important to realize that the time the patient enters the OR does not equate to surgical start time. The actual operation does not begin until anesthesia is done and the patient is positioned, prepped and draped for the procedure.

Throughput has been placed on the vanguard of hospitals' strategic action plans, partly as capacity management but also as a part of financial growth initiatives. It is therefore imperative that inpatient throughput does not affect the ability of the cardiovascular OR (CVOR) to perform surgical cases as a result of delays or cancellations. The concept sounds simple, but implementation can be more difficult to achieve because multiple variables can affect collaborative efforts.

#### **Variations in Point of View**

Before examining individual perspectives, it is important to consider the general environment that leads to the challenges between surgeons and surgical departments. When the recovery room calls for a room, the surgical department begins to shuffle to make a bed available. Availability frequently requires multiple patient moves and shifting assignments. On one hand, you have a highly complex procedure that has been completed without issue, but on the other hand, the simple task of securing a room seems insurmountable. Neither side actually truly understands the complexity faced by the other side.

Surgical services are composed of multiple departments, each accountable to its own administrative silo. When combining process improvement with another department that is inherently linked but goals are fragmented and confounded by individual conflicting incentives, patterns of accountability materialize uncovering many problems, thus making it exponentially more difficult.

### The Environment

In an urban, 900-bed quaternary care facility located in South Central Texas, the cardiovascular ICU (CVICU) and the surgical ICU (SICU) made up a combined 26-bed unit, and suffered from patient flow constraints, such as bed capacity and throughput obstacles, which severely hampered the CVOR's ability to perform surgery. To better understand this, the CVICU depended on the availability of step-down beds. Consequently, those step-down units relied heavily on medical or surgical units discharging patients. The busier things became, the harder it was to schedule cases, routinely creating delays and a backlog of cases. This problem had a harmful effect on the hospital's reputation, making long-term viability a concern.

# Physician Perspective

Eventually, physicians became frustrated with administrators for not dedicating resources to ensure their patients had a place for postprocedural recovery, and they began canceling cases. The initial reaction was that the surgeon began rounding on the CVICU and pressuring the unit leaders and staff for beds. Before long, this turned into the CVOR calling every few minutes to

see Interdepartmental Delays page 16

# **Interdepartmental Delays**

continued from page 14

check on bed status. Although somewhat effective at first, this strategy ultimately only tied up resources and further slowed throughput. An additional unfortunate result was that it damaged physician relationships with bedside staff, and also created tension between the CVOR and ICU.

#### **Facility Perspective**

In spite of advanced tracking processes, dashboards, centralized placement and daily bed huddles, the CVOR continued to experience delays. Cases frequently started late and the CVOR regularly had to hold patients in the OR suite post procedure. With OR charges averaging \$62 per minute,2 it is imperative that health care organizations understand the financial ramifications of this kind of situation on the bottom line. When assessing the cost of inefficient CVOR throughput, the effect of non-monetary cost cannot be overlooked. In this case, the morale of the receiving units suffered and staff frustration grew as the pressure to provide patient rooms increased past the available unit capacity.

## **Examining the Barriers**

The CVICU complex consisted of two units, each led by different directors with mixed reporting structures: a 12-bed cardiac ICU and 14-bed SICU. The 26-bed capacity was adequate to accommodate the

surgical volumes; however, nursing skill often varied among the staff. Consequently, this often required patients to be transferred between departments, sometimes more than once. This mere 100-foot move between the units resulted in more than 60-minute delays. Each lateral transfer created patient safety concerns, such as increased risk for extubation or device dislodgement, as well as general frustration, resulting in lower patient satisfaction scores.

#### **Engaging With Stakeholders**

Reaching out to surgeons was the first step in determining what to do next. Initiating these meetings helped understanding of their perspectives and scheduling habits. The meetings also let surgeons know this was a top priority and their concerns were important.

It was determined that the two inpatient units would be realigned under one leader. The unified restructuring facilitated a new partnership not only between the CVICU and SICU, but with the CVOR as well. The leaders of both departments reviewed the hierarchical structure, availability of resources, space limitations and patient flow (both internal and external), and several barriers were determined.

Discussion focused on the need for increased efficiency in discharging and transferring patients. Collaborative solutions were developed and staff were empowered to make changes that would serve the units equally. One change was having the OR staff arrive early to retrieve the next patient's bed, and to assist the CVICU to clean and turn over rooms. Another was having CVICU staff begin the recovery phase of care in the CVOR's holding area. This freed the anesthesiologist to see

the next patient and kept the CVOR's caseload moving.

The leaders of the CVICU and CVOR met before and after the morning bed placement huddle to discuss throughput needs and barriers that could be anticipated for the next eight to 12 hours. Once the needs were established, staff from both departments communicated to ensure changes would not result in a breakdown of the system. Over time, the leaders met less frequently, allowing the managers and charge nurses of these departments to take over the process.

# **Lessons Learned**

#### 1. Creating shared strategies

Shared strategies allowed staff to take ownership of the process. Better processes allowed nurses to improve their technical ability and deliver care at the bedside, and enabled the teams to work together in a safe and effective manner.

#### 2. Advocating with one voice

What began as a weekly case review attended only by physicians and nursing leaders developed into a multidisciplinary approach, allowing staff to become more familiar with their patient prior to the case.

#### 3. Creating a culture of accountability

Each department needs to take ownership of all mishaps. Additional aspects are clearly communicating expectations and encouraging the staff to participate in the strategic process.

#### Conclusion

A hospital's overall financial success depends on cost containment to protect its margins while delivering quality care. Approximately 65% of hospital admissions are related to surgical interventions and account for more than 40% of the total expenses of a hospital.

Nowhere in a hospital except the OR are costs measured in minutes and revenue gained on a per-case basis. Cost con-

tainment and increased surgical volumes are key to the financial health of a hospital. Although it may seem minor, even small delays can result in profit erosion, and even small improvements can boost the bottom line.

Hospitals must execute innovative strategies that deliver efficient throughput and enhance revenue, while still preserving high-quality services. Optimizing flow was about two leaders coming together to improve the quality dimensions of care delivery. When the departments were integrated, communication improved, team members engaged and goals were aligned.

#### References

- Taylor DL 3rd. Perioperative leadership: managing change with insights, priorities, and tools. AORN J. 2014;100(1):8-26, 27-29.
- 2. Macario A. What does one minute of operating room time cost? *J Clin Anesth.* 2010;22(4):233-236.

David L. Taylor III, MSN, RN, CNOR, is the principal of Resolute Advisory Group, LLC, a health care consulting firm in San Antonio. Brian Arndt, MBA, BSN, RN, CNML, is the administrative director of nursing at The Villages Regional Hospital in The Villages, Fla. Mr. Taylor is a board member of OR Management News.