

Surgical Efficiencies in the ASC- vs Hospital-based OR

Two surgeons share how they incorporate efficiencies into the most important factor in surgery: patient outcomes.

Surgical Efficiencies in the ASC Setting

BY PRAVIN U. DUGEL, MD



When considering the characteristics of surgical efficiencies as they pertain to vitreoretinal procedures in an ambulatory surgery center (ASC) setting vs a hospital setting, it is important to define surgical efficiency. The first and most important component of efficiency is patient safety. The second most important component is surgical outcome. From the standpoint of an ASC, the third most important factor is profitability. With these priorities in the correct order, it is perfectly acceptable to have patient care and business concerns coexist.

PROCEDURES TO ENHANCE EFFICIENCY

Whenever anyone who is new to my surgery center watches me operate, I imagine the experience would be rather underwhelming. I never take shortcuts, and I do not operate any differently than I would in a hospital setting. Efficiency should not change the way the surgeon treats the patient. Rather, outside of the eye is where efficiency comes into play; what happens around me is what should impress a visitor. Our turnover time is quick. Because we are in an ASC where we only perform eye surgery, our staff is specialized and highly

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trained to perform these tasks. All of our decisions are made based on what is best for the patient.

How we set up a room, how we prep the patient, how we handle the postoperative portion of the procedure—all of these are clearly defined, precisely orchestrated, and based solely on patient safety and comfort. It is because we are so efficient in our procedures to enhance safety that we can be more profitable, so these two components really do go hand in hand in our ASC.

KEYS TO EFFICIENCY

If I were to choose one component of my surgery center that has the greatest impact on efficiency, it would be my staff. From the front office staff to our nursing staff to our anesthesiologists, our staff is highly specialized and focused strictly on eyes. For example, because many patients who come to my practice have advanced diabetes, it is important that a board-certified anesthesiologist (MD or DO) on staff evaluate them thoroughly to ensure that their blood sugars are in control prior to a procedure. Having a physician anesthesiologist performing blocks and monitoring patients adds an extra layer of safety for my practice.

PROCEDURES AT SPECTRA EYE INSTITUTE: A CASE EXAMPLE

Most of our patients at Spectra are undergoing diabetic vitrectomy procedures. When a patient arrives, he checks in at the front desk, and a staff member is assigned to check the patient in and help him complete the necessary paperwork. A nurse then takes the patient back to an exam area where a team of three to four technicians manages the preoperative preparations, including ensuring that the patient receives a bed and is properly and comfortably positioned, initiating the IV, introducing the anesthesiologist, and checking to ensure the paperwork is complete.

Prior to the procedure, the eye is checked three times and is marked. If the patient has any questions, this is

the time when they are addressed, either by me or by my staff. Afterward, the anesthesiologist will administer a retrobulbar block, and then the patient is wheeled into surgery.

After surgery is complete, the same team takes the patient to the postoperative area, where a nursing team checks that the eye patch is secure and that the patient is comfortable and stable. Once these items are confirmed, family is allowed to come into the postoperative area. After home care instructions are given to family members, the patient is usually released. All of this totals approximately 10 to 15 minutes after the surgical procedure is complete.

VITREORETINAL TECHNOLOGY

New modalities in vitreoretinal surgery, such as microincisional vitrectomy (MIVS), have added to efficiency by allowing a safer procedure with less trauma to the eye and faster recovery times for patients. With this technology, more cases can be performed in a smaller window of time, adding to the business side of efficiency. There are many surgeons who do not use MIVS and are still efficient, but, in my experience, transitioning to smaller incisions has increased my level of patient care and allowed me to expand my caseload.

Streamlining my surgery with MIVS has allowed me to focus on outside-of-the-eye procedures such as turnover time. Since transitioning to MIVS, my turnover time between cases has gone from approximately 15 minutes to 7 or 8 minutes. If you multiply that by 15 cases in 1 day, there is a big time savings, which translates into profit.

All of the tools we use in surgery are important to our level of efficiency. I have never skimped on equipment or supplies. We use disposable equipment when possible to increase efficiency and safety, and we never restrict the use of expensive perfluorocarbon liquids or silicone oils. Our philosophy has been that if we provide our patients with the very best of everything, including state-of-the-art equipment, our ASC will survive and be profitable down the road. Having said that, we are fortunate that reimbursement has changed in our favor. Even before the changes in reimbursements for retina surgical procedures, however, we were profitable. If one looks at the total overhead in a practice, staffing accounts for the bulk of costs. By streamlining our procedures and specializing the tasks that our staff per-

forms, we are able to cut costs by eliminating unnecessary staff hours.

PATIENT SELECTION

I have never had a patient who was so sick that I would operate on him in a hospital but not an ASC. Quite frankly, if a patient is gravely ill, does he even require a vitrectomy before his other needs are addressed? That said, if I have a patient with uncontrolled diabetes or severe heart problems, I will not operate until the anesthesiologist has done a full evaluation and has given the green light.

There are two categories of patients I would recommend not have vitreoretinal surgery in an ASC: children and patients with a true latex allergy. Other than these two types of patients, I rarely have run into a case that needed to be moved to a hospital setting.

At Spectra, we never choose our patients, but we carefully choose our surgeons. We pick ethical and efficient surgeons and ask them to bring all their patients to our ASC, knowing that some cases will be financial losses. For example, we never turn away patients requiring complex procedures with perfluorocarbon and silicone oil. In fact, we feel that the toughest cases deserve to be performed at the best available facility, regardless of profitability.

We define efficiency as patient safety, outcomes, and profitability. If these priorities are kept in this order, then excellent patient care and profitability will coexist.

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Surgical Efficiencies: Hospital-based Surgery Centers

BY GEORGE A. WILLIAMS, MD



There is no doubt that safe and effective retinal surgery can be performed in either an ambulatory surgery center (ASC) or a hospital-based location. My group operates exclusively in hospital-based surgery centers for a variety of reasons. Perhaps the most important reason is our case mix.

We serve as a tertiary retina surgical referral center for our region and beyond. Last year, approximately 30% of our surgical cases came from more than 100 miles away. These patients are referred for everything from macular pucker to complex pediatric retinal detachments, ocular trauma, and ocular tumors. We need the support services of a major hospital to provide neonatal intensive care unit services, nonophthalmic consultations, such as radiation oncology, and sophisticated pediatric and adult anesthesia services to adequately treat many of our patients. In fact, we commonly receive referrals from ASC-based surgeons who believe their patients are better served in a hospital-based environment. Our primary hospital is a Level 1 Trauma Center and we are involved in at least one major eye injury every week. We therefore require the 24/7/365 capabilities of a hospital to best serve our patient and referral base.

REIMBURSEMENT ISSUES

Another primary reason for using a hospital-based surgery center is our reluctance to assume the substantial financial obligations and risks involved in the development, operation and management of an ASC. Although the recent changes in ASC reimbursement have improved the financial model for retina surgery in an ASC, there is reasonable doubt whether the proposed increases will in fact occur. For example, for a variety of regulatory technicalities involving budget neutrality considerations, 2009 updates were less than expected. Recently, the Medicare Payment Advisory Committee (MedPAC), the group that advises Congress on Medicare payment policy, has questioned the need for any future updates to ASC payments.

The problem of pass-through payments for surgical devices remains a significant issue for the ASC-based surgeon. Under the hospital Outpatient Prospective

Payment System (OPPS), hospitals receive payment beyond the Ambulatory Payment Classification (APC) for drugs and devices while ASCs do not. This means that ASCs must cover such costs from the APC payment, which for 2009 is between 44% and 61% of the hospital-based rate depending on the procedure.

DISADVANTAGES OF HOSPITAL-BASED SURGERY

Despite the above benefits, our group recognizes that there are significant disadvantages of hospital-based surgery. The biggest disadvantage is the lack of control over the preoperative and postoperative process. Although these issues can be mitigated through good communication with the hospital, there are plenty of times when I just want to scream. If there is a potential upside to the recent economic downturn, it may be

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that hospitals are starting to understand the importance of service to both patients and surgeons. Increasingly, hospitals are trying to duplicate the superior service of the ASC model.

EFFICIENCY IN THE HOSPITAL SETTING

In the hospital-based system, I consider efficiency from the perspective of the patient and the surgeon. For the patient, efficiency means completing the entire surgical experience as safely and effectively as possible in the minimum amount of time. Sedated or sleeping patients remember nothing about their surgery, but they and their families remember everything about their experience outside of the OR. This is an area where an ASC model has inherent advantages. At a large hospital, there are often problems with parking and long distances to reach the operating rooms. These issues can be mitigated by effective patient flow management in the preoperative and postoperative periods. For the surgeon, efficiency means completing all of the preoperative, intraoperative, and postoperative aspects of surgery as safely and effectively as possible in the minimum amount of time.

In the preoperative period, this means the patient is ready when the surgeon is ready with all necessary lab work, preoperative evaluations, and paperwork completed. This requires a coordinated effort between nursing, anesthesia, and the surgeon. Nothing is more frustrating

COVER STORY

than to be ready to operate and then have to wait for a delayed lab result. In the OR, efficiency is driven by experienced scrub techs and nurses and proper setup of the case. The advent of small-gauge sutureless surgery has decreased operating times for many cases, thereby improving efficiency. In my experience, the biggest problem with hospital efficiency is after the end of the case, in the nebulous realm of turnover time.

Turnover time is truly one of the mysteries of the universe, but, for those who dare intervene in the sanctity of nursing and anesthesia interoperative affairs, it represents the best opportunity for saving time and improving efficiency.

Whether efficiency is directly related to patient outcomes is uncertain. Even an inefficient surgery can lead to a successful outcome. However, efficiency is directly related to patient satisfaction. Patients have surgery with the expectation that they will be better. How they arrive at the final result drives their level of satisfaction.

PROFITABILITY

Profitability is simply revenue minus expenses. In both an ASC and a hospital, revenue is driven by case volume, and case volume is driven by efficiency and case mix. Expenses reflect personnel time, supply costs, equipment costs, and fixed costs. In the current system, the surgeon who performs six macular hole surgeries generates the same revenue as the surgeon who performs six complex detachment surgeries. It is the expenses that determine the per-case profit. Currently, the reimbursement system greatly favors the hospital and hospitals do very well on retinal cases. Of course, the surgeon does not share in this profit as he or she can in an ASC.

PROTOCOLS FOR SURGERY AND STAFFING ISSUES

Hospitals are under intense regulatory scrutiny concerning patient safety and quality of care. As a result, surgical protocols have become increasingly common in the OR. These protocols involve issues such as correct surgical site confirmation, preoperative and postoperative medication reconciliation, appropriate pain management, thromboembolic event prophylaxis, and infection control. Hospital-based retina surgeons are subject to these requirements, and it is just a question of when—not if—ASCs will also have to comply. Although such requirements do increase the “hassle” factor, there is no question that they also improve patient safety and are welcome additions.

Our group has tried to standardize surgical equipment as much as possible in an effort to control costs and improve efficiency. The trick is to do so without jeopardizing innovation and access to new technology.

Staff is a critical factor in efficiency. Competent and experienced staff can make the difference between a pleasant day in the OR and a frustrating ordeal. A dedicated retinal team is essential in either an ASC or the hospital. A major problem with training a good retinal team is the complexity of the instrumentation and the surgery. Even an experienced cataract scrub tech can be lost on a retina case without adequate training. Fortunately, some of the newer surgical platforms are designed to be more user friendly with regard to setup and operation, which should minimize the frustrations of novice personnel. ■

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