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OFFICE-BASED SURGERY

The Benefits and Safety of Ophthalmic Office-Based Surgery (OBS)

Data on 50,000+ successful outcomes accelerates the movement toward office-based surgery.

Nearly a decade after the first ophthalmic office-based surgery (OBS) suite made its debut, a growing body of research demonstrates that OBS offers both surgeons and patients a multitude of benefits and safety that match—and in some cases exceed—that of hospital outpatient departments (HOPDs) and ambulatory surgery centers (ASCs).

OBS Benefits for Surgeons and Patients

Office-based surgery suites represent the latest step in the evolution of ophthalmic surgery. The first ASC opened in 1970, with cataract surgery joining the list of outpatient procedures performed in these facilities 10 years later. By 2001, 44% of all cataract surgeries were performed in ASCs, with the first ophthalmic office-based surgery suite opening in 2005. Today, 2.2% of cataract surgeries are performed in OBS.[1-2] In a recent industry poll, surgeons were asked how long it will take to get to 25%, and the majority opinion was 5 to 10 years.[3]

To date, nearly 200 ophthalmic OBS suites have been established in the U.S., offering multiple benefits for both surgeons and patients. For the surgeon, OBS provides total control over every aspect of the surgical process, from start to finish; offers the opportunity to earn additional revenue beyond their professional fee; enables them to collect reimbursements from Medicare and commercial payors without having to perform procedures in a standalone ASC; and allows them an unrestricted surgical schedule, enabling increased case volume and practice growth.

Patients benefit from more streamlined and personalized care when clinic and surgery are integrated in one location. Hassle-free scheduling, a comfortable environment with a familiar staff, less anesthesia, and a shorter surgical time all result in higher patient satisfaction.

Furthermore, OBS has created an opportunity to increase access to care and reduce transportation costs for patients and caregivers, particularly for those in rural areas.

OBS suites and the procedures themselves are also cost-effective for physicians and patients.[4] The cost of building and maintaining an OBS is significantly less than an ASC and adds value to the practice. Most existing LASIK suites can serve as an OBS suite with little or no additional construction; as little as 700 square feet from an existing procedure room or unused space can be converted to OBS. In addition, as patients seek greater transparency in costs and play a more active role in choosing where to have their surgery performed, OBS suites can provide a marketing advantage in competitive regions. In less populated regions, where ASCs and HOPDs are limited, OBS provides a more accessible alternative to care.

Safety Proven in More Than 50,000 Cases

Patient safety, of course, is paramount to the success of OBS. A common misconception is that OBS is performed in standard procedure rooms. In fact, office-based surgery suites are bona fide operating rooms that operate under the same safety and accreditation standards as ASCs and hospitals. They are regulated in all 50 states, and operate under the physician's license governed by the individual state board of medicine using either Class A (oral sedation; e.g., valium) or Class B (monitored) anesthesia.[4]

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OBS Myths vs. Facts

Myths	Facts
Cataract surgery is not safe in the office given the age and comorbidities of cataract patients.	A 2023 study published in the *Journal of Cataract and Refractive Surgery* showed that patients ages 65+ had overall occurrence rates similar to the total cohort.
The intricate, delicate, and complicated surgical procedures performed by varying experienced eye surgeons remain a concern when performed outside of a full facility operating theater.	iOR suites are full operating theaters specifically designed for the procedures performed in them, with the same facility layout and environment standards found in an ASC.
Sterility controls are inferior to a hospital operating room or a dedicated ambulatory surgical center (ASC) operating theater.	iOR office-based surgery suites are full operating suites with the same ophthalmic safety standards, protocols, sterility, and infection control as an ASC or hospital outpatient department.
OBS does not require anesthesia to be administered and monitored by an anesthesiologist.	Patients in iOR suites are monitored to the accreditation standards for anesthesia. Most OBS cases are performed with light oral sedation (Class A) and do not require monitoring in any setting. OBS cases with moderate IV sedation (Class B) are monitored by a licensed anesthesia provider.
Possible patient complications during pre-screening, surgical, and post-procedure phases are a concern for offices without full emergency resources.	Each patient undergoing procedures in iOR suites must be cleared for office-based surgery by an ophthalmologist. If the ophthalmologist determines that OBS is not appropriate, the surgery will be performed in an ASC or hospital.
Staff at OBS are likely to have expertise in eye surgeries and patient care, but ASC staff may be better equipped to handle a broader range of surgical complications.	In iOR suites, appointment to the medical staff is only extended to qualified and credentialed physicians and allied health professionals who continuously meet the standards set for them by the governing body. The requirements ensure that staff are trained to respond to surgical complications.

In 2016, one of the largest U.S. studies to investigate the safety and effectiveness of OBS was conducted by Ianchulev, et al. at a Kaiser Permanente Colorado integrated healthcare center.[5] The researchers reviewed 13,507 patients (21,507 eyes) with a mean age of 72.6+/-9.6 years who underwent elective office-based cataract surgery between 2011 and 2014. Phacoemulsification was performed in 99.9% of cases, and manual extracapsular extraction was performed in 0.1% of cases. Systemic comorbidities included hypertension (53.5%), diabetes (22.3%), and chronic obstructive pulmonary disease (9.4%).[5]

Postoperative mean best-corrected visual acuity measured 0.14±0.26 logarithm of the minimum angle of resolution units. Intraoperative ocular AEs included 119 (0.55%) cases of capsular tear and 73 (0.34%) cases of vitreous loss. Postoperative AEs included iritis (n = 330, 1.53%), corneal edema (n = 110, 0.53%), and retinal tear or detachment (n = 30, 0.14%). No endophthalmitis was reported. Second surgeries were performed in 0.70% of treated eyes within 6 months. There were no life- or vision-threatening intraoperative or perioperative AEs. It was concluded that office-based outcomes were consistently excellent, with a safety profile expected of minimally invasive cataract procedures performed in ASCs and HOPDs.[5]

More recently, Kugler, et al. evaluated the case records of 18,005 patients who underwent OBS for a visually significant cataract, refractive lens exchange (RLE), or phakic IOL implantation at 36 participating U.S. sites. Outcome measures included assessment of intraoperative and postoperative complications, including iritis, corneal edema, endophthalmitis, and unplanned vitrectomy. The rates of postoperative endophthalmitis, toxic anterior segment syndrome (TASS), and corneal edema were 0.028%, 0.022%, and 0.027%, respectively. Unplanned vitrectomy was performed in 0.177% of patients.[6]

"Our study demonstrated that the

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safety profile of office-based lens surgery either matches or exceeds the literature-reported values of adverse events documented for modern cataract surgery," says Lance J. Kugler, MD, director of Kugler Vision, Omaha, NE, and medical director of iOR Partners, the only company dedicated to ophthalmic office-based surgery.

Third, iOR Partners collects data on cases performed in iOR surgical suites® as part of their accreditation program. Occurrence data is collected quarterly from surgeries performed in multiple centers and using different surgical techniques. A study on 32,722 real-world cases —including office-based cataract, refractive lens exchange (RLE), phakic IOL (ICL), glaucoma, retina, cornea, and oculoplastics—shows that safety outcomes match or exceed those of other outpatient settings.[7] An abstract of this study will be presented at AAO 2023.

This growing collection of safety-related research and recognition of the benefits of OBS to physicians and patients alike reflect much the same progression as that of hospital-based to ASC-based surgery. With over 50,000 successful procedures, eyecare providers are moving towards the tail end of the OBS acceptance curve. Ultimately, surgeons who expect to remain competitive and keep up with the growing patient demand cannot afford to miss the opportunity to explore the next step in the evolution of ophthalmic surgery.

About iOR Partners

iOR Partners is the undisputed leader in office-based surgery innovation. iOR Surgical Suites® integrate clinic and surgery in one location to increase surgeons' flexibility and improve the patient experience while providing the highest level of safety. Just as an ASC makes surgery turnkey, so does iOR Partners. The company provides accreditation, supply management, safety and compliance services, billing support, and other business-related functions needed for day-to-day operations so you can focus solely on your patient's surgery without leaving your clinic.

iOR Partners has developed 100+ iOR suites® across 30+ states with over 50,000 successful outcomes, and has collected reimbursements from Medicare, Medicare Advantage, and all major commercial payors. Visit iorpartners.com for a free feasibility analysis for your practice.

The safety and effectiveness of OBS across 3 studies

	iOR data[7]	Kugler et al.[6]	Kaiser Permanente[5]
Surgical Occurrences	49 centers, 30,790 cases	36 private practices, 18,005 cases	13,507 patients (21,501 eyes) age 72.6 +/- 9.6 years
Endophthalmitis	0.016%	0.028%	0 reported cases
Unplanned Vitrectomy	0.182%	0.177%	unreported
Return to the OR	0.074% (most for removal of residual cortex)	0.067%	0.70% second surgeries performed within 6 months
TASS or significant iritis	0.016% (single outbreak at 1 center)	0.022%	1.53%
Corneal Edema	0.025%	0.027%	0.53%
Referred to Hospital	0.006% (nausea and unable to keep food and fluids down, previously undiagnosed A. Fib)	0.011%	0.0002% (severe headache, near syncope and patient fall)

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