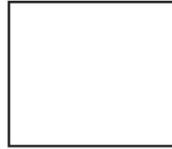


Vance Thompson Vision
3101 W 57th St.
Sioux Falls, SD 57108



New & Noteworthy

What's New in Technology

Practice Management Software Conversion

In the spirit of our commitment to investing in the world's most advanced technology and providing a world-class experience, all Vance Thompson Vision clinics transitioned to Nextech's practice management platform on June 1, 2024.

This new, state-of-the-industry practice management system will enable seamless communication with your office through improved coordination and interoperability. It is designed to streamline our administrative processes, allowing our team to focus more of their time on what matters most—delivering exceptional care to patients.

The transition has been smooth, but we encourage you to reach out if you experience anything less than what you have come to know as our standard of excellence.

As always, thank you for trusting us to care for your patients. We are honored to collaborate with you.

If you have any questions, please call Melissa Palmer at (605) 371-7121 or email her at melissa.palmer@vancethompsonvision.com.

Operation Sight

What Is Operation Sight?

Operation Sight is the ASCRS Foundation's charitable cataract surgery program. Launched in 2014, it serves financially vulnerable, uninsured individuals who cannot afford or access care.

Who Qualifies for Operation Sight?

To be eligible for Operation Sight services, patients must be at or below 200% of the Federal Poverty Level defined by the Federal Poverty Guidelines. They must be uninsured or underinsured (insurance must not cover cataract surgery), and must have a formal cataract diagnosis where surgery has been deemed medically necessary.

CLINIC NEWSLETTER



Patient Experience Highlights

See and Do + Back-to-Back

The See and Do program is designed to reduce the number of trips patients need to make to our clinic for cataract surgery. These special clinic and surgery center appointments are scheduled so patients can have their complete evaluation in the morning and surgery on their first eye in the afternoon with their second eye the next day, all in one trip (back-to-back).

After patients receive the surgery they need, they can return to you for their one-day post-op appointment if they choose. Patients are usually able to get into surgery within three weeks of us receiving your note.

Learn more about the See and Do program at vancethompsonvision.com/od/resources/see-and-do

Doctor Resources



Save The Date

Fargo Symposium
Friday, September 20

South Sioux City Evening of Education
Thursday, September 26

Montana Symposium
Friday, October 11

Omaha Symposium
Friday, October 25

Sioux Falls 2025 Spring Symposium
Friday, March 28

Scan to see all upcoming events, doctor resources, and opportunities.



Summer 2024

Clinic Corner

Addressing Residual Refractive Error After Cataract Surgery

Tanner Ferguson, MD | Vance Thompson, MD

Intraocular lens (IOL) technology continues to evolve and expand with an array of options available to allow us to match the IOL to the patient when it comes to cataract surgery or refractive lens exchange (RLE). Despite the continued advancement in IOL technology, certain principles remain important for maximizing outcomes. Whether a patient is implanted with a monofocal or advanced implant, we believe in the same approach with addressing residual refractive error. A patient with a traditional, monofocal implant is optimized with the best possible prescription for glasses or contacts. Similarly, in a patient with an advanced technology IOL (ATIOL) implant, we do a careful manifest refraction and optimize the implant with a corneal refractive procedure.

In both cases, visually significant residual refractive error is addressed to maximize the technology of the implant. IOL technology is continuously changing, but treating residual refractive error to maximize the performance of the IOL implant remains the most important factor for ensuring patient satisfaction and enabling neuroadaptation.

The impact of residual refractive error on vision and patient satisfaction in patients implanted with ATIOLs has been widely studied. A recently published large-scale study by Schallhorn et al¹ demonstrated the impact of residual sphere on satisfaction with every quarter-step (± 0.25 D) away from plano negatively impacting satisfaction. Further, a number of studies have also explored the reasons for dissatisfaction following multifocal (or ATIOL) implantation including the widely cited paper in 2009² by Woodward in the *Journal of Cataract & Refractive Surgery*. This study importantly identified that the most common reason for dissatisfaction with advanced technology IOLs was ametropia, or residual refractive error. Several other studies^{3,4} have corroborated these findings over the last decade across multiple generations of ATIOL implants. Recently, an updated study that modeled the original 2009 study was presented at the 2023 American Society of Cataract and Refractive Surgeons (ASCRS) annual meeting and similarly evaluated reasons for

dissatisfaction with modern-day IOL options. Unsurprisingly, this study reported similar findings and found that residual refractive error remains the major driver of patient dissatisfaction in patients with ATIOL implants.

Collectively, these studies emphasize the importance of both access to and experience with corneal refractive procedures to address residual refractive error and maximize the technology of the IOL inside the eye. In addition to LASIK and PRK for refractive enhancements, astigmatic keratotomy (AK) remains a valuable tool for treating residual astigmatism. In addition to blurred vision, uncorrected refractive error or astigmatism can

We strongly believe in addressing residual refractive error to get patients to the finish line after cataract surgery.

also contribute to photic phenomena such as glare and starbursts and lead to patient frustration. Further, failing to address residual refractive error can negatively impact or disrupt the process of neuroadaptation, which is a critical phase of healing as the brain adapts to the new optical system and modified visual inputs.

The importance of access and experience with corneal laser enhancements also plays a meaningful role in our evaluation of patients electing to undergo cataract surgery. Similar to a patient electing to undergo a refractive surgery such as LASIK, we evaluate whether a patient would be a candidate for a laser enhancement procedure prior to them undergoing cataract surgery if they are choosing an advanced technology implant like a trifocal or EDOF implant. This evaluation includes closely assessing the corneal topography and possible adjunctive epithelial thickness mapping in appropriate cases. If a patient is motivated but they are not a great candidate for additional corneal surgery such as a LASIK or PRK fine-tune, this patient may be better suited for an adjustable optic implant such as the Light Adjustable Lens (LAL). As the only IOL that can be adjusted after it has already been implanted, this IOL is well-suited⁵ for patients with

1 Schallhorn SC, Hettlinger KA, Hannan SJ, Venter JA, Teenan D, Schallhorn JM. Effect of residual sphere on uncorrected visual acuity and satisfaction in patients with monofocal and multifocal intraocular lenses. *J Cataract Refract Surg*. 2024;50(6):591-598. doi:10.1097/j.jcrs.0000000000001418

2 Woodward MA, Randleman JB, Stulting RD. Dissatisfaction after multifocal intraocular lens implantation. *Journal of Cataract & Refractive Surgery*. 2009;35(6):992-997. doi:10.1016/j.jcrs.2009.01.031

3 Gibbons A, Ali T, Waren D, Donaldson K. Causes and correction of dissatisfaction after implantation of presbyopia-correcting intraocular lenses. *OPHTH*. 2016;Volume 10:1965-1970. doi:10.2147/OPHTH.S114890

4 Seiler TG, Wegner A, Senfft T, Seiler T. Dissatisfaction After Trifocal IOL Implantation and Its Improvement by Selective Wavefront-Guided LASIK. *J Refract Surg*. 2019;35(6):346-352. doi:10.3928/1081597X-20190510-02

5 Jones M, Terveen DC, Berdahl JP, Thompson V, Kramer BA, Ferguson TJ. Clinical outcomes of the light adjustable lens in eyes with a history of prior corneal refractive surgery. *J Cataract Refract Surg*. Published online May 13, 2024. doi:10.1097/j.jcrs.0000000000001481

Doctor Spotlight



Michael Greenwood, MD
West Fargo, ND

Dr. Michael Greenwood is the board-certified ophthalmologist at the helm of our West Fargo team. The former standout on the UND football team and North Dakota native is known for both his kind-hearted and understanding approach to patient care and his advanced surgical skills. He's proud to lead an amazing team that supports each other in helping every patient who walks through the doors.

Outside of the clinic, Dr. Greenwood enjoys running each morning, working in the alternative reality space, and spending time with Heidi, his wife, and their kids. Together, the Greenwood family enjoys exploring Fargo, as well as going on trips to visit family and see the country together.

a history of prior LASIK, PRK, RK, or evidence of corneal topographic irregularities, which suggests they wouldn't be a great candidate for a corneal-based refractive procedure to fine-tune their vision.

An additional important consideration is the time and potential steps necessary to optimize the implant inside the eye. If a patient has evidence of residual refractive error but the vision obtained with the manifest refraction is not crisp, we evaluate for evidence of posterior capsule opacification (PCO) or abnormalities of the tear film. Even small amounts of PCO migrating into the visual axis can degrade visual quality. Therefore, we have a low threshold to perform a YAG capsulotomy, particularly if the patient



Jason Schmit, OD
Alexandria, MN

Dr. Jason Schmit discovered he wanted to pursue eyecare from a shadowing experience with Dr. Thompson. Throughout his career, Dr. Schmit has had formative opportunities to manage ocular surface disease and medical aesthetics/oculoplastics, own a private optometric practice, and help lead a large, publicly-traded LASIK corporation as the Vice President of Operations.

Since 2013, his career has come full circle to practicing here at Vance Thompson Vision. Dr. Schmit enjoys the outdoors by golfing, biking, hiking, or boating.

was initially very happy with their vision in the early postoperative period.

In conclusion, we strongly believe in the importance of addressing residual refractive error to get patients to the finish line after cataract surgery. Failing to address untreated, visually significant refractive error can not only lead to undesirable visual quality and contribute to patient frustration, but can also contribute to undesirable photic phenomena such as starbursts or glare. Access to a laser platform for corneal laser fine-tune remains an essential piece of the puzzle for delivering patient satisfaction with modern-day IOL technology. ●

Let's Connect

Find more on our OD Portal

To find research, CE opportunities, and additional resources, visit our OD Portal at vancethompsonvision.com/od

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Listen to the adVANCED Patient Care podcast

Designed to keep you at the forefront of the field, Vance Thompson Vision's podcast offers dynamic insights, practical clinic tips, and engaging discussions with experts. Recent episodes cover groundbreaking research, the latest advancements in LASIK, and innovative approaches to cataract treatment, providing you with the knowledge and tools needed to elevate your craft.

