The Optometric Trends Discovery Group's 2023 Report on

# Cataract Surgery Comanagement: INSIGHTS & TRENDS

By Dr. Cecelia Koetting OD, FAAO, DipABO



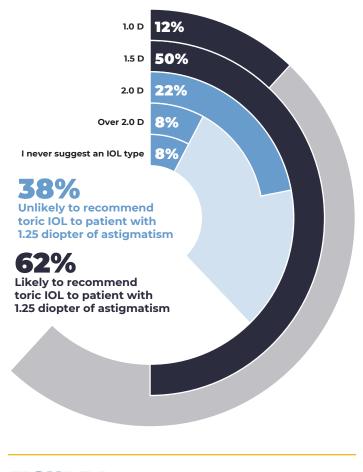
The collaborative management of cataract patients with astigmatism or presbyopia is an important part of any optometric practice. While ophthalmologists perform the surgeries, optometrists play a crucial function in the referral process and ongoing treatment of these patients. Understanding the attitudes and perceptions of optometrists towards cataract surgery comanagement is essential for effective collaboration and patient care.

We'll review data from the 2023 Optometric Trends Discovery Group (OTDG) Survey to gain insights into the clinical practice patterns and opinions of US optometrists as they relate to cataract surgery.

#### **Underuse of Toric IOLs in Patients with Astigmatism**

According to survey results, only 11% of referred comanage patients received toric intraocular lenses (IOLs). This statistic feels surprisingly low considering the number of patients who could potentially benefit from these lenses. Typically, toric IOLs are utilized in patients with 1.25 or more diopters of corneal astigmatism. To better interpret this data, it would be helpful to compare the 11% with the actual percentage of patients that meet that threshold. Yet, even without this comparison, signs of under-correction are evident. As shown in Figure 1, 62% of surveyed doctors start recommending toric IOLs at 1.0 or 1.5 D of astigmatism (1.25 D was not an option), leaving the remaining 38% to either set a higher threshold for recommending toric IOLs at 2.0 D or higher (30%) or abstain from recommending a specific IOL type at all (8%). This trend mirrors the historic propensity for under-correction of astigmatism among optometrists, even when prescribing toric contact lenses.<sup>1</sup>

Additionally, 70% of respondents reported that most or all of their patients were satisfied with the outcomes of toric IOLs. These high satisfaction rates emphasize the potential of these lenses to significantly improve the vision and quality of life for a much larger percentage of patients than are currently receiving them.



**FIGURE 1.** When referring a patient for cataract surgery, at what amount of regular astigmatism do you begin recommending a toric IOL?

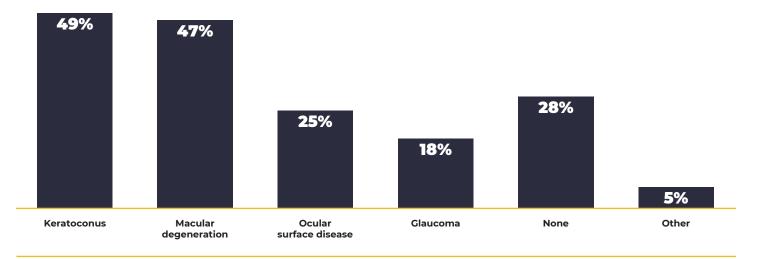
1. Young, G., Sulley, A., & Hunt, C. (2011). Prevalence of astigmatism in relation to soft contact lens fitting. Eye & contact lens, 37(1), 20–25. https://doi. org/10.1097/ICL.0b013e3182048fb9 "Overcoming cost as a barrier requires that conversations with patients extend beyond the upfront cost of toric IOLs to also encompass potential financial benefits, such as reduced expenditure on glasses and other related items."

#### **Barriers to Toric IOL Adoption**

Survey respondents were asked to identify the biggest challenges to referring patients for toric IOLs. Surpassing all other concerns, 76% of respondents identified cost as the primary barrier. Cost is almost entirely a burden for the patient, with the only additional clinic expense being chair time.

Overcoming cost as a barrier requires that conversations with patients extend beyond the upfront cost of toric IOLs to also encompass potential financial benefits, such as reduced expenditure on glasses and other related items. We also need to underscore the improvements in quality of life that can be achieved with toric IOLs. For instance, patients with high astigmatism who do not use glasses may enjoy better functionality when not wearing corrective lenses. Similarly, patients experiencing mobility challenges due to age or medical conditions like Parkinson's or MS could benefit from enhanced mobility and safety, as clear vision without glasses can play a pivotal role in preventing hazardous incidents such as falls.

The survey also examined respondents' views on absolute contraindications to toric IOLs. As shown in Figure 2, approximately half identified keratoconus and macular degeneration as definitive barriers to toric IOL use, while only 28% stated there were no absolute contraindications. However, contrary to these views, conditions such as stable keratoconus, macular degeneration, and even glaucoma aren't always prohibitive. For instance, toric IOLs can potentially diminish astigmatism in patients with stable keratoconus. The benefit for those with macular degeneration varies based on disease severity, astigmatism magnitude, and patient motivation. For glaucoma, it becomes an absolute contraindication only in severe, end-stage cases unlikely to show significant improvement with toric IOLs.





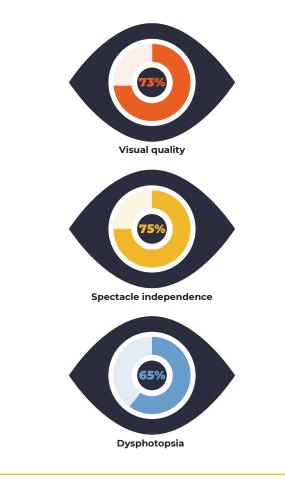
## **Presbyopia Conversion Rates**

Similar to toric IOLs, only 11% of referred comanaged patients receive presbyopia-correcting IOLs. The conversion rate could be influenced by various factors including socioeconomic status, occupation, hobbies, and the environment. In my practice, we have a conversion rate of 30 to 40%, which may be somewhat unique, but 11% seems too low for most practices, and it's reasonable to assume that more than 11% of patients would enjoy an improved quality of life with presbyopia-correcting IOLs. Encouragingly, 64% of respondents are actively engaging with some or all potential candidates for cataract surgery who wish to be independent of spectacles for near vision, discussing the option of presbyopia-correcting IOLs. Although this figure is pleasantly surprising, to match the percentage of patients who actually receive these IOLs with those who could truly benefit from them, we need to aim for a higher level of proactive discussion.

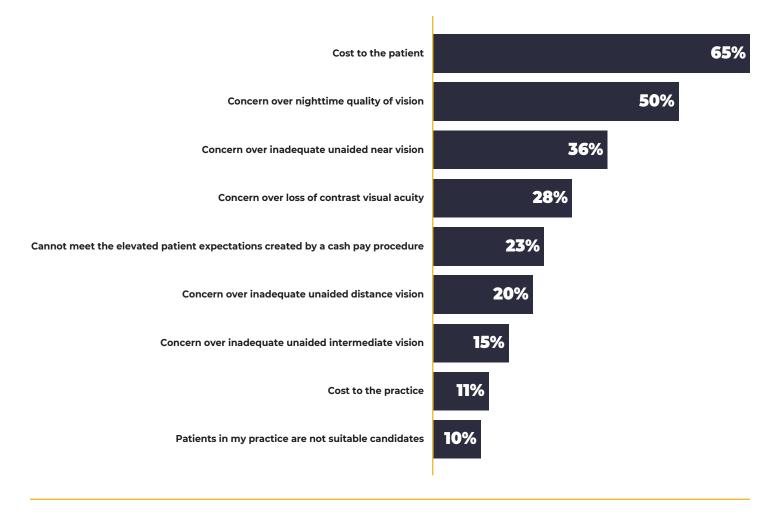
#### Satisfaction with Presbyopia-Correcting IOLS

Survey data suggests a generally high levels of satisfaction among patients receiving presbyopia-correcting IOLs, as seen in in Figure 3. Seventy-three percent of these patients are content with their level of visual acuity one month post-surgery, which is consistent with both my experience and the results of other surveys. Moreover, 75% of patients expressed happiness with their level of spectacle independence one month after the procedure. Both of these are encouraging.

However, patient satisfaction post-surgery is notably lower. Despite premium IOLs minimizing dysphotopsia, a surprising number of respondents reported less than 75% or even less than 50% of patients are content. This calls for a deeper understanding of dysphotopsia and investigating potential causes beyond the lens. This can include dry eye, corneal surface irregularities, partial ptosis, and dermatochalasis, all of which can contribute to dysphotopsia. Thus, it's crucial to consider these factors comprehensively to better understand the root causes of dysphotopsia.



**FIGURE 3.** What percentage of your presbyopia-correcting IOL patients are happy with their level of visual quality, spectacle independence, and dysphotopsia 1 month after surgery?



**FIGURE 4.** What do you consider to be your biggest barrier to referring patients for presbyopia-correcting IOL procedures in your practice? (Select all that apply.)

# **Barriers to Presbyopia-Correcting IOL Adoption**

As with toric IOLs, cost to the patient was the most frequently cited barrier to referring patients for presbyopia-correcting IOLs (65%). Unlike toric IOLs, however, cost did not dwarf all other barriers. Concerns over nighttime quality of vision (50%) and inadequate unaided near vision (36%) were also prevalent, as shown in Figure 4. Consequently, clinical factors were viewed as significant barriers.

The survey asked respondents to identify the top three post-surgical concerns influencing their presbyopia-correcting IOL recommendations. The top two choices – maximizing visual acuity across all ranges and ensuring high-quality contrast vision – are indeed valid considerations. They align with the primary goal of achieving optimal visual outcomes for patients, which is the main objective of such procedures.

However, the third choice, minimizing medical complications (corneal edema, endophthalmitis, iritis), warrants further consideration. Undoubtedly, minimizing complications is crucial in any surgical intervention. Still, the particular lens type used during the surgery does not typically influence these complications' onset or severity. Therefore, it might be misleading to emphasize the choice of the lens as a significant factor in avoiding these complications.



# **Toric IOLs**



of referred/comanaged cataract procedures receive toric IOLs



**70%** of respondents say that most or all of their patients are satisfied with toric IOLs

## Biggest barriers to referring patients for toric IOL procedures:

76% Cost to the patient or clinic

**29%** Not able to achieve desired refractive spherical outcome <20% All other barriers

# **Presbyopia-correcting IOLs**



#### 119

of referred/comanaged cataract procedures receive presbyopia-correcting IOLs

# 57%

of respondents average presbyopia-correcting IOL cataract patient visual quality is the MOST important outcome to maximize patient satisfaction



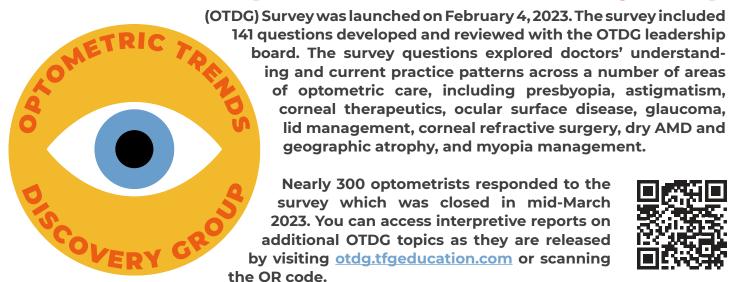
Average chances of significant night vision dysphotopsia in a presbyopiacorrecting IOL patient that has no residual refractive error and a healthy ocular surface **60%** of respondents proactively speak about presbyopiacorrecting IOLs to some or all qualified patients

# The most important post-surgical concerns that influence lens recommendation when selecting presbyopia-correcting IOL:

**#1 (79%)** Maximizing visual acuity at all ranges



# **The Optometric Trends Discovery Group**



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#### **Meet the Author**

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Dr. Koetting is a clinical instructor and Optometrist at the University of Colorado School of Medicine in the Department of Ophthalmology in Denver, CO. Her primary focus is in anterior segment and ocular surface disease, neuro-optometry, and perioperative care. She partakes in clinical research and has served as Residency and Externship Director and adjunct faculty for several schools and colleges of optometry.

Dr. Koetting is a member of Intrepid, a fellow in the American Academy of Optometry, a diplomate of the American Board of Optometry, an active member of AOA and has served as both local and state officers within AOA. She was named young Optometrist of the year by the state of Virginia. Dr. Koetting is an nationally and internationally known speaker and author with a focus on ocular disease, surgical co-management and neuro-optometry.

Dr. Koetting grew up in St. Louis, Missouri, and comes from a long line of Optometrists as she is a 4th Generation Optometrist. In her free time, she enjoys teaching yoga, skiing and hiking with her husband, and playing the cello.