

By D. Rex Hamilton, MD, MS, FACS

Barriers to success with PC-IOLs

Improve your presbyopia-correcting IOL conversion rates by communicating their value and benefits.



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Disclosures: Dr. Hamilton is a consultant for Alcon Laboratories, Carl Zeiss Meditec and Johnson & Johnson Vision.

The tidal wave of baby boomer cataract patients has begun to descend upon our practices. At the same time, presbyopia-correcting IOL (PC-IOL) technologies continue to advance, as evidenced by the recent approval of the first trifocal IOL implant in the United States (AcrySof IQ Panoptix, Alcon). The prospect of minimizing or eliminating the need for spectacles in one's life is, on its face, an astounding opportunity, particularly for the lives of our busy, active, health conscious, tech-savvy patients. Why, then, did only 9% of cataract surgery patients receive PC-IOLs in 2018 and why are 21% of U.S. surgeons not using PC-IOLs at all?¹

In this article, we examine the two major barriers to successful conversion of our cataract patients to premium IOLs — a goal that we, as anterior segment surgeons facing yet another drop in our professional reimbursement from CMS, should embrace as the proverbial “win-win” scenario for us and our patients.

FAILURE TO ESTABLISH VALUE

The problem

How often do you and your surgical counselors spend significant time explaining the merits of a toric or PC-IOL only to hear the patient respond, “It costs *how much*? I thought my insurance covered cataract surgery. I just want what insurance covers.” Meanwhile the patient may wear expensive jewelry, pull up in a fancy car or show evidence of previous plastic surgery. Clearly, we have been unable to establish the value of our incredible service in this patient's mind, despite obvious signs that the patient has

made many discretionary purchases in the past.

This is understandable. The vast majority of us did not enroll in medical school because we wanted to improve our sales skills, nor did we acquire said skills in those hallowed halls. In addition, some of us may find selling a bit distasteful, maybe even debasing of our profession.

I was unquestionably in that category as a young, academic ophthalmologist in 2004. Over the years, as the premium IOL channel opened up and technology improved, I became comfortable with what the lenses could and could not provide. I suddenly realized that not recommending these options to patients who qualified was doing them a disservice, relegating them to a life dependent on glasses all because I was not comfortable with the firm recommendation and the discussion of cost. That's right ... a *firm* recommendation from the surgeon is the most effective tool to increase patient conversion to premium surgery.

Today, I never think of my firm recommendation as a sales tactic. It comes from the heart, as I truly believe in the technology and am actually excited for the patient and what lies ahead. I present the IOL in the context of an *opportunity* for patients that they only get once in their lives. I inform cataract patients that we even have folks coming in these days, before they develop cataracts, seeking out these premium lenses as an opportunity to reduce dependence on glasses — a procedure called refractive lens exchange. “And, by the way, the cost is entirely out of pocket for them and well north of what it will cost you since you have a cataract,” I add.



The estimated indirect cost of monofocal vs. presbyopia-correcting IOLs

The average US cost per patient was calculated based on indirect cost components estimated to occur over the remaining lifetime after cataract surgery.

Cost Component	Presbyopia-correcting IOLs	Monofocal IOLs
Time spent during clinic visits and travelling	\$1,291.41	\$1,567.58
Transportation to/from clinics (car, bus, etc.)	\$125.84	\$411.54
Visit to correct visual acuity	\$91.15	\$410.18
Clean spectacles (sprays, cloths, etc.)	\$18.20	\$81.47
Spectacles (including replacements over time)	\$608.80	\$2,737.23
Average Cost per Patient (in USD)	\$2,135.40	\$5,208.00

*This study was based on data for Alcon's ReSTOR® IOLs.

The average US cost per patient was calculated by: 1) taking a straight average of the cost components reported across four countries,⁹ 2) inflating the cost estimates from 2006 to 2018 Euros,¹¹ and 3) converting the average costs in Euros to USD.^{10, 12}

IMAGE COURTESY: J&J VISION

Figure 1. A sample of the indirect costs associated with PC-IOLs vs. monofocal IOLs shows the potential cost savings of spectacle independence.

Solution

Let's look at the ways we can communicate the value of PC-IOLs to patients:

Freedom from spectacles: Baby boomers and younger patients deal with some if not all of the following throughout the day: menus, price tags, computers, newspapers, books, cell phones, tablets, e-readers, putting on makeup, grocery shopping, cooking, social near vision. Patients need to see the value of being able to better see these things every waking hour of every day. If you need something more concrete, consider the cost savings of not needing prescription glasses with this summary of costs of PC-IOLs vs. monofocal IOLs (Figure 1).²

Added health risk: Falls are responsible for significant morbidity and mortality in the elderly. During 2014, approximately 27,000 older adults died because of falls, 2.8 million were treated in emergency departments for fall-related injuries and approximately 800,000 of these patients were subsequently hospitalized, costing an estimated \$31 billion in annual Medicare costs.³ One study identified poor depth perception as a specific risk factor for hip fracture among elderly women.⁴ Another study showed a significant increase in fall risk in patients wearing multifocal (eg, bifocal, trifocal, progressive) spectacles.⁵ PC-IOLs avoid the need for full-time glasses, providing better depth perception and reduced fall risk, and this benefit should be communicated to patients.

PATIENT SATISFACTION CONCERNS

Leftover from early technology

Many of us remember starting out with first-

generation multifocal IOLs (MF-IOLs) and accommodating IOLs (AC-IOLs) following the CMS ruling in May 2005 that allowed billing patients for premium services associated with these lenses. I began offering the lenses at that time and struggled with my screening protocol: Which patient will appreciate the benefits of the MF-IOL or AC-IOL without displaying buyer's remorse?

The early MF-IOLs were plagued by waxy vision and significant night-time dysphotopias. As a refractive surgeon, I was

often frustrated by hitting my refractive target only to have an unhappy patient complaining of halos and the inability to read a menu in a restaurant. The AC-IOL had an unpredictable refractive endpoint, often requiring significant patient reassurance after the first eye just to get to the second eye. Then, after making a targeting adjustment on the second eye, I would be happy with some level of monovision to achieve the desired visual range.

In the refractive cataract surgery world, we know that unhappy patients can severely undermine a practice reliant on word of mouth and/or optometric referrals.

Get off the sidelines

Fortunately, in the world of premium IOLs, competition breeds technological innovation. The repertoire of PC-IOLs currently available is truly a different world. I encourage anyone who is sitting on the sidelines after being burned from early generation lenses to step back into the arena. You will be pleasantly surprised by these features of the newer lenses:

- Wider range of uncorrected vision
- Less night-time dysphotopias
- Tighter refractive endpoints with femtosecond laser technology, intraoperative aberrometry and advanced IOL calculation formulas

DEMONSTRATING THE RESULTS

Manage patient expectations

Over the years, I have learned many lessons. What is the most important? Underpromise. A patient whose outcome exceeds expectations, on

uncorrected near vision for example, will be very happy and is much less likely to persevere on other issues such as nighttime dysphotopias.

Let's look at two techniques I have found very helpful for setting expectations in the PC-IOL arena.

Real world near vision card

I have found that patients are generally happy if they can achieve J3 to J5 uncorrected near vision. So, I developed a near card to appropriately set those expectations. I give the card to patients and tell them it serves two purposes.

First, I show them what the IOL can and cannot provide. They should expect to achieve J5 uncorrected near vision. The card labels J5 and larger font size as "Near." It labels J3 and J2 as "Micro." I tell them we should achieve "Near" but should not expect "Micro." Often, after the second eye is implanted, they are reading the J3 line with both eyes and we celebrate.

Second, I tell them they have homework to do after the first IOL is implanted. At the one-week postop visit, they already know that I will ask them how the first eye is doing on the card. This is a jumping off point for learning about their overall experience with the first eye and to decide what adjustments, if any, I wish to make for the second eye. I make my decisions based on this patient discussion, measured uncorrected distance and near acuity and manifest refraction. If the patient needs more near vision, I might change from an extended depth of focus IOL (EDOF IOL) to a multifocal IOL, for example.

This near card offers a firm foundation for not only establishing expectations but also on which to build a partnership with patients. I tell them, "We are going to work through this process together to achieve the best outcome possible."

Visual aids

A picture is worth a thousand words. It does no good to describe halos, glare and starbursts to a patient. Showing the patient simulations of what

he or she will see following surgery is the best tool we have and critical to setting appropriate expectations. I have incorporated several of the visual aids available in Rendia Inc.'s Outcome Simulator to describe two scenarios:

Night-time dysphotopias: The Rendia Outcome Simulator allows you to customize scenes to show mild, moderate and severe halos, glare and starbursts. I have customized a night-time scene for both multifocal and EDOF IOLs

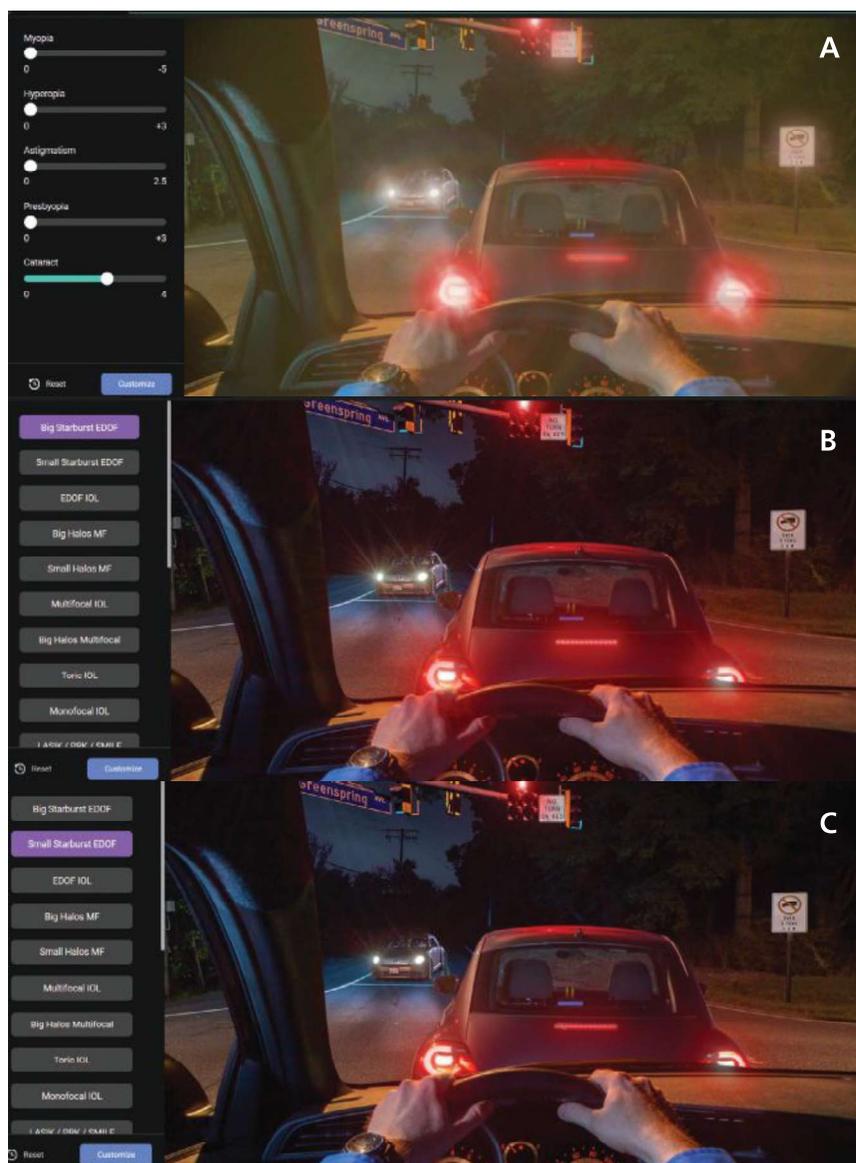
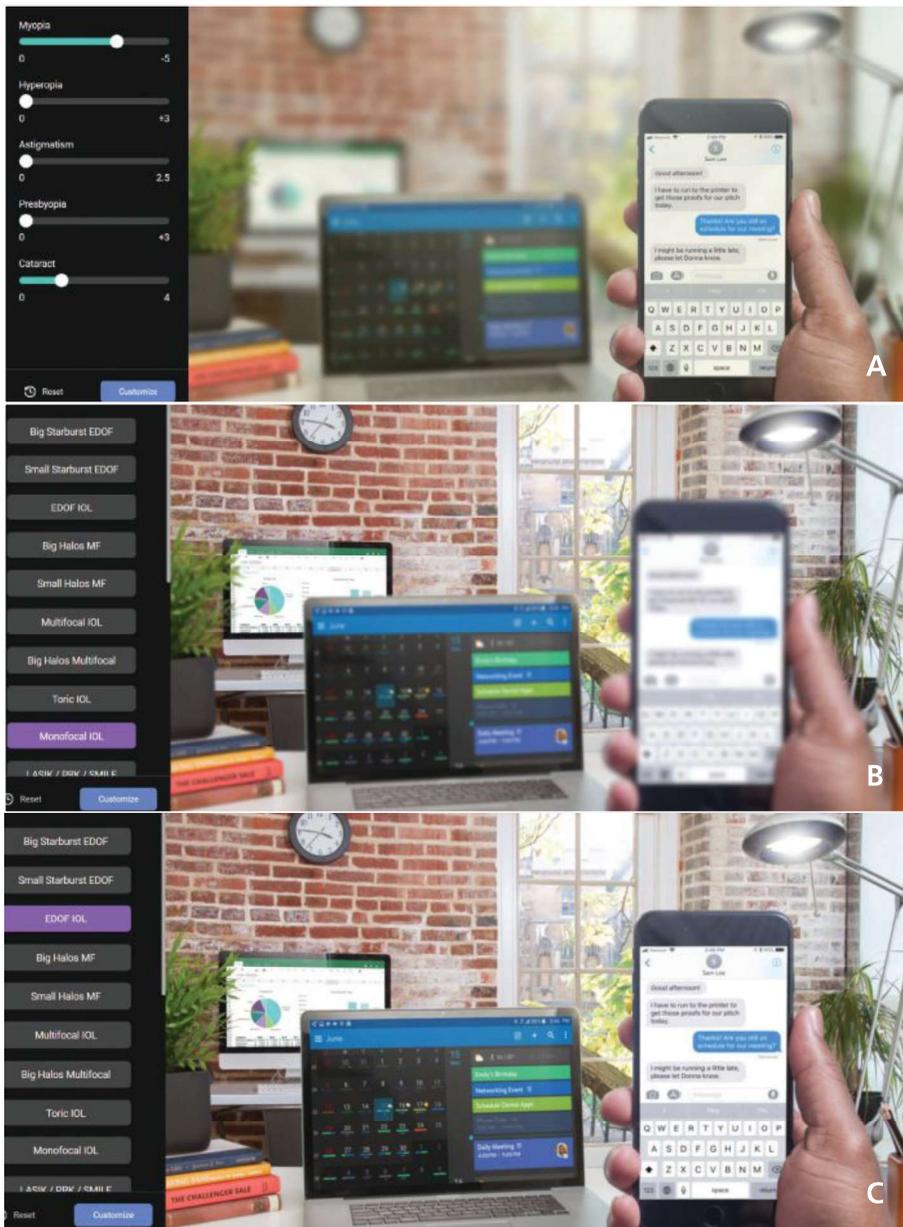


Figure 2. The Rendia Outcome Simulator allows the surgeon to customize the scene to fit various scenarios. **A.** Vision through cataract at night simulator. Glare and halos around headlights caused by cataracts. **B.** Large night-time starburst (EDOF IOL) simulator. Simulation of the large starbursts off of headlights that will occur immediately following EDOF IOL implantation. **C.** Small night-time starburst (EDOF IOL) simulator. After second eye EDOF surgery and neuro-adaptation, starbursts, while still present, are less apparent.

IMAGES COURTESY: RENDIA, INC.



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Figure 3. A. Myopic vision with cataract simulator. Simulation of mild cataract in the myopic patient demonstrating ability to still read cell phone without glasses. B. “Insurance covered” IOL simulator. Simulation demonstrating blurred near vision without glasses following implantation of standard monofocal IOL. C. EDOF IOL simulator. Simulation of useful near and excellent intermediate and distance vision without glasses following implantation off EDOF IOL.

(Figure 2, page 27), which I use to show patients the most severe case and tell them this will be what they see right after the IOL is implanted. I say, “We’ve changed the optics your brain has been used to your entire life — in an instant — yet you still have the other eye your brain is used to. These starbursts will be very obvious after surgery. After we complete the second eye surgery, however, your brain will no longer have a comparison of new and

old.” Then, I switch to the moderate starburst image and continue. “Your brain will adapt to these starbursts that will become much less obvious over time, much like how you’ve gotten used to wearing your watch, necklace or ring. You don’t feel them because you’re used to them.”

Myopic patient expectations: Myopic patients want unaided distance vision (they’ve never had it) and expect to maintain unaided near vision (they’ve always had it) following cataract surgery. I have a customized preset in the Outcome Simulator showing these myopic patient what they have been used to their whole life up until the cataract (Figure 3A) and what they will see following cataract surgery with an “insurance covered” (monofocal) implant (Figure 3B). They are usually shocked by the blurry cell phone in the foreground and say, “I don’t want that.” This presents the perfect opportunity to quickly switch to the “premium” option (Figure 3C) to show that they can maintain useful unaided near vision and obtain the excellent unaided distance vision they have never had but very much desire.

The Rendia Outcome Simulator also includes simulations of astigmatic effects on vision, which can be very useful in discussing the benefits of a toric IOL option.

CONCLUSION

The PC-IOL channel offers today’s anterior segment surgeon the ability to provide unprecedented

results to their cataract patients and to be appropriately compensated for their remarkable skills. Hopefully you will find some of the tools discussed here useful as you expand your practice offerings in this arena and embrace this opportunity for both you and your patients. **OM**

For references and additional photos, see the online version of this article.