Evaluation and Adoption of New Presbyopia-correcting Intraocular Lenses

A SURVEY OF SURGEONS

The process of evaluating new intraocular lens (IOL) technologies can be a barrier to the adoption of new lenses. A survey of 395 physicians was conducted in order to understand how ophthalmologists evaluate new lenses, specifically presbyopia-correcting IOLs (PC-IOLs), and determine the barriers to adoption. First, surgical ophthalmologists at multiple US sites were assessed via an online survey about their current processes of evaluating new IOL lens technologies. Next, after thorough patient education, the surgeons selected 10 patients for implantation. During a follow-up survey, participating surgeons provided feedback in order to shape a new standard for evaluating IOL technologies.

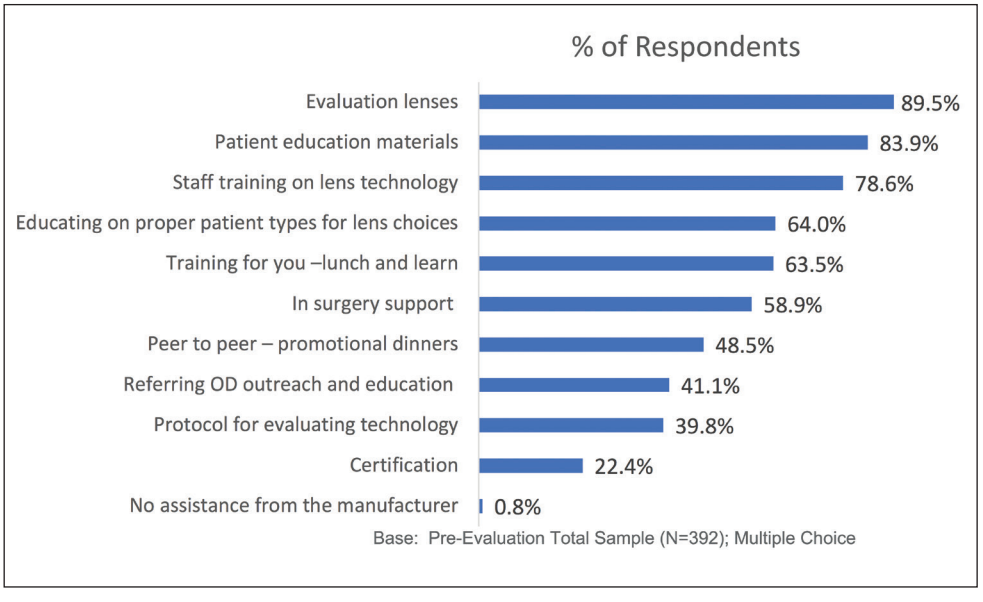

Figure 1. What assistance, if any, would you like from the manufacturer when evaluating new IOL technology?

"AFTER THE IOL EVALUATION PROGRAM, ALMOST 90% OF SURGEONS WERE EXTREMELY INTERESTED OR VERY INTERESTED IN EXPANDING THEIR USE OF PC-IOLS."

"OVERALL, SURGEONS COMMUNICATED THAT THERE IS A NEED FOR A MORE FORMALIZED PROCESS FOR EVALUATING NEW IOLS AND TECHNOLOGIES."

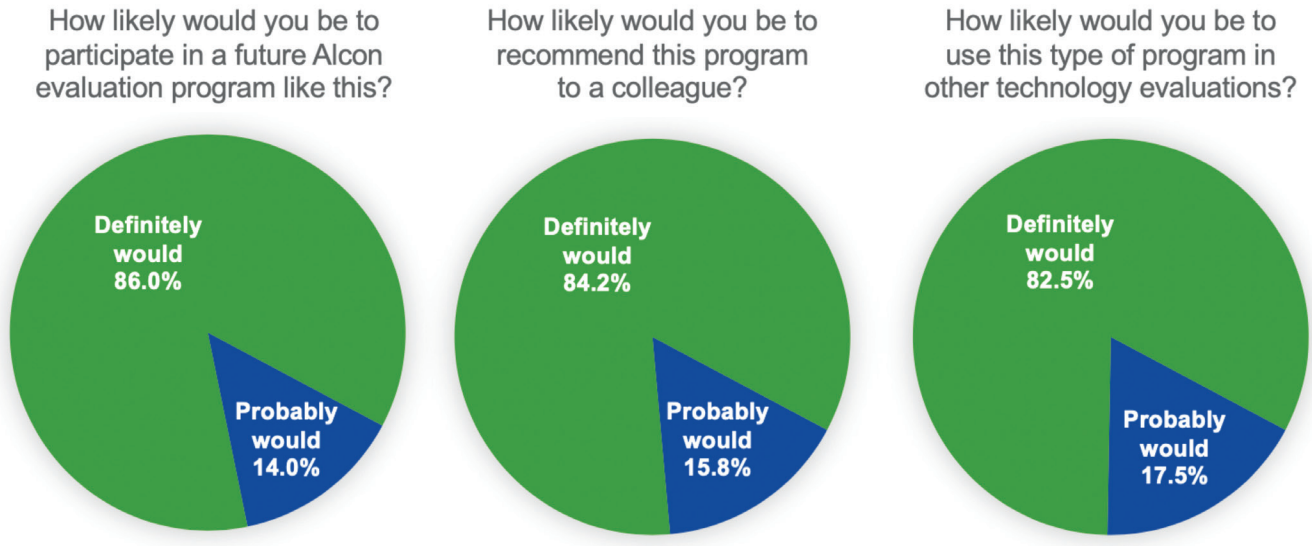

Figure 2. Future participation and likelihood to recommend.

In the initial survey, surgeons were asked to describe their rates of adoption for new IOL technologies. About 34.2% of surgeons self-identified as "innovators" who are among the first to try new technologies. The majority (55.4%) self-identified as "early adopters" who wait less than 1 year to adopt a new technology. When evaluating new technologies, surgeons rely on several key factors:

- manufacturer support and training,
- ensuring staff members are appropriately trained,
- implementation of postoperative patient surveys, and
- ensuring that the same technician enters biometry measurements for consistency.

Less than 50% of surgeons believed their existing IOL evaluation protocol is excellent or nearly excellent on a scale of 1 (poor) to 7 (excellent). Most surgeons in the survey said they need to see 10 or 20 postoperative patients before committing to routinely implanting a new IOL technology (n = 392). Surgeons rated feedback from their trusted peers and sample IOLs for implantation (at no cost to the patient) as the best sources for valuable information for their understanding of new IOL technologies. Additionally, surgeons highly rated manufacturer-provided patient education materials and staff training on the IOL technology (Figure 1). After the IOL evaluation program, almost 90% of surgeons were extremely interested or very interested in expanding their use of PC-IOLs.

After proper patient education and selection for implanting 10 evaluation lenses, surgeons were asked a series of follow-up questions related to the new technology evaluation process. Overall, 86.6% of surgeons rated the new process as excellent or nearly excellent on a scale of 1 (poor) to 7 (excellent). Roughly 75% of physicians believed that 10 evaluation lenses were sufficient for deciding whether to adopt a new lens or not. Overall, surgeons communicated that there is a need for a more formalized process for evaluating new IOLs and technologies. Most surgeons also indicated that they are interested in improving their new technology and lens evaluation process, they would like to implant more PC-IOLs, and they would recommend technology evaluation programs (Figure 2). ■

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