

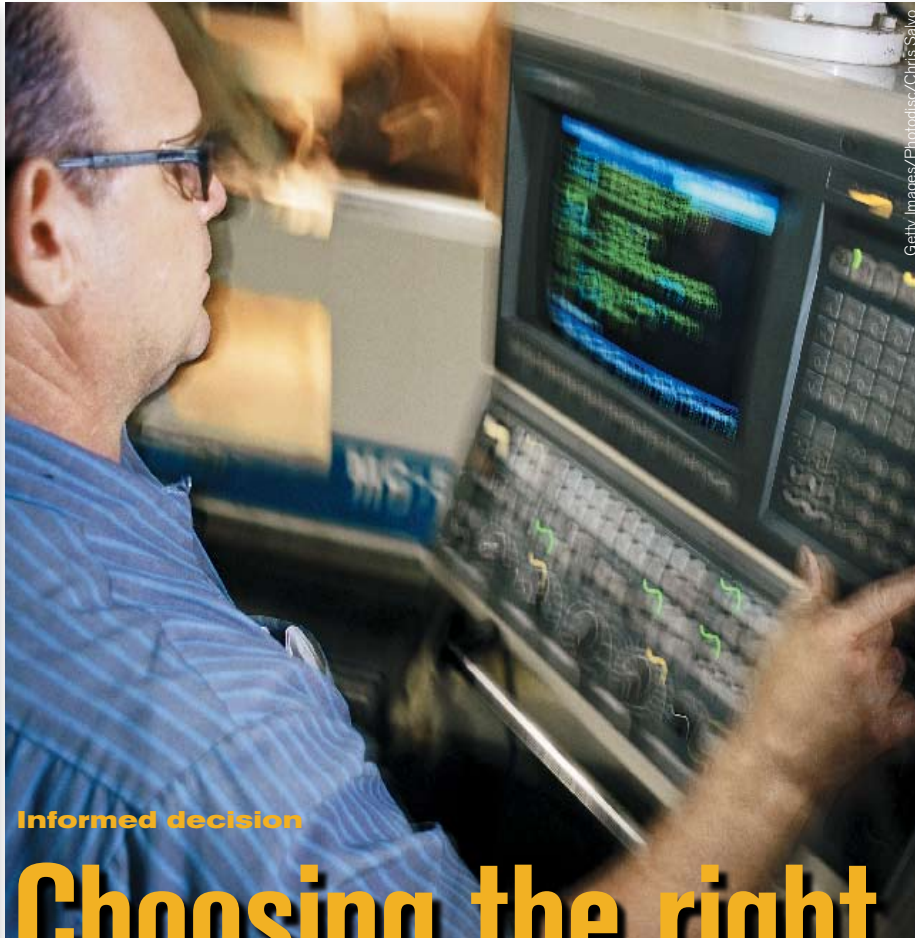
# InDispensable

Management Solutions for your Dispensary

## Ophthalmology Times®



Getty Images/iStock/Jonathan Gelber



Getty Images/Photodisc/Chris Salvo

Informed decision

## Choosing the right business model for your optical lab

Investment dollars, wise choice can mean success or failure for integrated retail lab operation

### Take-Home Message

Many ophthalmologists are investigating dispensing as a secondary revenue stream. The decision to dispense is tied to providing optically correct lenses with a keen fashion sense. During the decision-making process, ophthalmology practices will find that essentially two lab business models exist—version “A,” buying only uncut lenses and doing all the lens processing work in-house, or version “B,” dispensing eyewear to the patient only as a finished product. Understanding the advantages and disadvantages of each lab business model can help determine the most effective option for your practice.

By Steve Swalgen

In an increasingly dynamic economic environment, a growing number of ophthalmologists and ophthalmology groups are looking toward adding dispensing eyewear as an adjunct revenue stream. The analysis and decision itself is beyond one of an investment, but is tied to the intricacies of both providing optically correct lenses and in a growing number of dispensing locales, a keen understanding and sense of frame fashion going forward.

The backdrop to all of that is technology offerings that can accommodate a dispensing practice in a complete man-

ner, but is increasingly challenged or offset by a wholesale lab environment predisposed to all facets of current lens evolutions, lens coating, and finishing prowess. Simply put, the ophthalmic dispenser is and will continue to be more and more defined as a practice that is either supplied completely with “uncut” lenses or lens blanks—to be processed or finished in the practice lab—or only provides “cut” (already finished) lenses in the frame and as supplied by the wholesale lab directly to the practice.

The more traditional aspects of an independent practice dispensary that finishes a significant percent of its own work

See **New technology** on page 72

## In Brief

Time, labor savings

### Access to OLA services now available online

**Fairfax, VA**—Optical Laboratories Association (OLA) has opened online access to many of its services through a new Web site feature—OLA ONLINE.

OLA ONLINE includes a store, meeting registration, and invoice payments. All of the online services are accessed through links on the OLA Web site, [www.ola-labs.org](http://www.ola-labs.org).

“Members and exhibitors now have another choice of ways to do business with their association,” said Bob Dziuban, OLA executive director, “through 24/7 online access via the OLA Web site. Phone, fax, and e-mail will continue to be options; OLA ONLINE adds an entirely new option.”

Access to OLA ONLINE is via secure log-on codes unique to each company. All of the online services provide immediate confirmation of the completed transactions, with a follow-up e-mail confirmation as well. OLA currently is distributing customized communications to members, exhibitors, and past participants, confirming their secure log-in codes.

For more information or log-in assistance, call OLA at 800/477-5652.

Educational opportunities

### CooperVision expands patient videos, online CE

**Fairport, NY**—Further expanding into new media territory, CooperVision has added a patient video to CooperVision.tv, and two video-based continuing education (CE) courses to its popular online learning center.

The informational video, “Avaira with Aquaform technology: Contact lenses drenched in comfort,” now available at <http://coopervision.tv>, presents patients with information on the company’s Avaira 2-week silicone hydrogel contact

See **In Brief** on page 76

## New technology

Continued from page 71

while still sending some percent of the more high end or specialized style jobs to a wholesale lab is a waning condition, based on costs (needs) to be productive in the most complete manner possible. A finish-only dispensary or “fully integrated retailer” that also generates, surfaces, coats, and finishes lenses will be either model “A”—buying only uncut lenses and doing all its own lens processing work—or model “B,” dispensing only eyewear as the final product to the patient. Rising costs of lenses in the aggregate and therein the potential for lens waste (out of pocket) risks require processing completely versus just partially is leading to an either an all-in-the-pool or not choice.

**The ability to develop and implement a full lens process that is extremely accurate with minimal waste is more possible now due to technology advancements.**

The good news is that technology is available to make either choice feasible to the ophthalmology practice seeking the profitable business adjunct of dispensing. For the ophthalmology group wishing to round out its practice via the fully integrated retailer model, lens generating/surfacing and coating technology exists that is small enough physically and economically to accommodate the most modest of volumes up to what would be considered a mid-size wholesale lab. The same applies for the final, perhaps most critical, aspect of lens processing—lens finishing, in which the surfaced lens (prescription applied) is edged, beveled, and often polished to make an optically accurate lens that fits the patient’s chosen frame.

**An ophthalmology practice needs to consider how much of its patients’ eyewear experience they want to be completely responsible for.**

### A level playing field

The ability to develop and implement a full lens process that is extremely accurate with minimal waste is now more possible than ever due to technology advancements. Recent edging equipment advances have led to the onsite ability to produce the most high end/high fashion most commonly with very high base curvatures.

With the advent of digitally surfaced/direct/freeform lenses, the need for a secure lens production and finish process with minimal human intervention—except for mounting—also is critical. The still relatively new and advancing form of lens processing is effectively the mathematical clarification of curvature resulting in the customization of individual prescription visual acuity.

In laymen’s terms, the lens itself becomes one big optical center that can enhance critical visual areas, such as peripheral vision. Any ophthalmology practice considering in-house lenses processing and finishing must factor in the likely continuing market penetration of those types of lenses in the coming 2 to 4 years. The cost/benefit ratio of the growth of that type of patient optical choice and added value could make the decision to go forward with a full-scale, in-house lens processing system a straight-line decision.

Alternatives to the business rationale or consideration of adding in-house surfacing/generating, coating, and lens finishing to a decision to dispense exist. Opportunities are available and will continue to evolve from the major lens companies already positioned to take on all this for the practice and with relatively quick turnaround for the patient.

Major lens companies and the larger retail chains have made significant investments in their capabilities to offer a complete choice to the individual eye-care practitioner (ECP) and ophthalmologist that dispenses. They have either acquired pre-existing independent labs and made them part of their own lab network or enhanced and advanced their individually owned labs with new technologies to improve cost efficiencies while introducing continually new lens treatments, coatings, and technologies.

Those competitive and improving economies of scale are bringing—and will continue to bring—lens programs that can be construed as a fair economic counter to the ophthalmology practice considering its own investment, albeit more limited, in such business and lens processing technologies.

Small-scale hybrid scenarios also



**The LT-1000 tracer (Santinelli International) features 3-D tracing with onscreen data input, shape editing, and high-wrap frame software.**



**Among the key features of the Contour Max (Optek) lens generator and lap cutter are a touch screen control system and graphical display of calculated lenses and lap tools.**



**The Unity MAX blocker (Optek) combines highly accurate lens layout and blocking in one compact system.**



**The LEX-1000 tabletop edger (Santinelli International) offers high base curve edging and bevel customizing capabilities.**

are part of the alternative position, whereby the individual practice will not process or edge lenses at all but, rather, will use a supplied frame tracer—often by the lens company itself—to help expedite the turnaround time for patients to get new eyewear.

Remote frame tracing (RFT) is not without certain needed disciplines by the practice, for example, calibrating the tracer each morning. RFT has been around for several years with inconsistent national presence, but with pockets of loyalty often fostered by a particular lab or lens company. The economic model to make it a more mandated behavior has yet to be pushed hard enough by any one organization or lens supplier, possibly for fear of losing an account.

### Robotic lens production

How is the business decision to be made to implement a fully integrated retail lab with small to medium volume

scale wholesale lab lens processing with delivery of visually accurate eyewear to the patient? The choice is not as turnkey as perhaps it should be, although the small- and medium-scale coating, surfacing/generating, and finishing companies certainly want that to be the case.

An ophthalmology practice needs to consider how much of its patients’ eyewear experience they want to be completely responsible for, versus always giving that level of care and perception while effectively subcontracting the aspects of lens processing and finishing.

Warranty protection also is a leading factor. Simply doing it all on your own will allow certain economic advantages and benefits for the practice or group, with little-to-no warranty protection regarding the eyewear materials supplied from the manufacturer. Having the eyewear process handled by a wholesale lab—especially if owned by

### Focal Point

**Doing it all on your own will allow certain economic advantages and benefits for the practice, but with little to no warranty protection regarding the eyewear materials supplied from the manufacturer.**

Clean and comfortable

# Multi-purpose CL solutions differ in protein removal

## Further investigation needed on effect of deposits on wearing comfort, study suggests

**By Nancy Groves**

Reviewed by Meng C. Lin, OD, PhD, FAAO

**Berkeley, CA**—A small, preliminary study has shown that multi-purpose contact lens (CL) solutions differ in their protein removal efficiency. The finding suggests the need for further investigation into the effect of protein deposits on the comfort of contact lenses, according to Meng C. Lin, OD, PhD, FAAO, associate clinical professor and director of the Clinical Research Center, School of Optometry, University of California, Berkeley.

In a previous clinical study, Dr. Lin and colleagues found that subjects who wore high-protein uptake lenses (Acuvue 2, Johnson & Johnson Vision Care), preferred one multi-purpose disinfecting solution (Opti-Free Express [OFX], Alcon Laboratories), saying that it provided better cleaning and comfort. An opposite trend was observed for subjects who wore low-protein uptake lenses (Focus Night & Day, CIBA Vision), however; these subjects preferred

### Take-Home Message

Multi-purpose contact lens solutions appear to differ in their protein removal efficiency, a trait that may influence the comfort of the lenses. Further investigation and comparison of the properties of multi-purpose solutions are needed to clarify the hypothesis, which was suggested by findings of a recent small study.

another lens solution (Opti-Free [OF], Alcon Laboratories) to OFX.

“It is possible that lens care solutions that have surface-active agents can facilitate removal of the protein a little bit better, hence enhancing wearing comfort for some lenses,” Dr. Lin said. The different comfort preferences of the lens users, however, also suggest that some multi-purpose solutions may clean lenses too well by stripping off too much of the natural tear film components on the lens surface.

### Three experiments

To test the hypothesis that multi-purpose solutions vary in protein removal efficiency and to further understand how differences in protein removal efficiency affect wearing comfort, Dr. Lin and colleagues conducted three experiments to examine the efficiency of several commercial multi-purpose solutions.

First, they used a very well-characterized silica surface in a controlled environment with single-protein adsorption and removal by multi-purpose solution. For the second

experiment, also in vitro, investigators soaked low-protein uptake lenses in model protein mixtures and compared total protein concentration with and without multi-purpose solution exposure. The final experiment was an analysis of total protein with ex vivo lenses cleaned with either OFX or OF solutions. Subjective comfort ratings also were collected.

“In a very controlled environment, the degree of lysozyme removal is very different among different multi-purpose solutions. OFX can remove about 80% of the adsorbed lysozyme as compared with only about 15% removal with OF. Most of the multi-purpose solutions remove less than 20% of lysozyme,” she said.

In the second experiment, in which lenses were exposed to the model tear protein, a direct protein quantification agent was used to analyze protein concentration. The results also showed that OFX was more efficient than OF in removing protein.

### A clinical setting

After confirming that some solutions have much higher efficiency of protein removal than others, investigators conducted a third experiment to determine whether the trend would hold up in a clinical setting and whether differences in protein removal efficiency could impact comfort while wearing low-protein uptake silicone hydrogel lenses. They conducted a contralateral, double-blind study on nine asymptomatic soft CL wearers. The subjects wore low-protein uptake lenses for 2 weeks and were instructed to use OFX in one eye and OF in the other. The lenses were collected and the total protein was quantified with bicinchoninic acid assay. Subjective wearing comfort also was assessed.

The investigators found that six of the nine subjects had higher total protein concentrations in the eye exposed to the OF solution. The difference in protein concentrations between the two multi-purpose solutions was about 7%, however, which was not statistically significant. Interestingly, 56% of participants obtained better comfort with OF than with OFX; 11% had no preference, while the remaining 33% preferred OFX over OF.

Based on those preliminary results, the team calculated the sample size needed to detect a 20% difference in total protein concentrations and determined that at least 30 subjects would be required to reach statistical power. Furthermore, to establish a relationship between the amount of protein deposits on a lens and wearing comfort, a much larger sample size would be required, Dr. Lin said.

“These results lead to a cascade of questions regarding the role of protein deposits in wearing comfort for low-protein uptake silicone hydrogel lenses,” she concluded. “Given the potential significance of variable protein removal efficiencies among multi-purpose CL solutions, further investigation may identify appropriate combinations of lens materials and solutions for enhancing wearing comfort.” **OT**

**‘It is possible that lens care solutions that have surface-active agents can facilitate removal of the protein a little bit better, hence enhancing wearing comfort for some lenses.’**

**Meng C. Lin, OD, PhD, FAAO**

FYI

**Meng C. Lin, OD, PhD, FAAO**

Phone: 510/643-8447 (office)

E-mail: [mclin@berkeley.edu](mailto:mclin@berkeley.edu)

Dr. Lin does not have any financial interest in the products mentioned.

## Automation

Continued from page 72

a leading lens company—likely will allow distinct warranty advantages to the final eyewear choice and delivered product. The background to that is greater, albeit more costly, lens processing technology that is available—often robotically influenced—for the small-to-medium-volume integrated retailer that eases the possibility of traditional lens waste scenarios. Thereby, the traditional warranty issue is somewhat more controllable and should not be as high profile.

Any equipment supplier will tell its customer that in the era of less human need in eyewear production and delivery and greater technology, the subject of maintenance (education) is the singular strength to quarterly profitability. Most equipment companies offer advanced training programs specific to the maintenance personnel of individual labs, because equipment operational aspects have become highly software and technologically controlled. The communal aspects of the optical industry’s key associations in setting standards applicable to lab management software companies, equipment suppliers, lens manufacturers, and evol-

ving vision portals has given an added breadth of security and risk mitigation to practices considering the fully integrated retailer path.

In the final analysis, there are fair and economic advantages to being all encompassing and making the investments necessary toward full retail integration. That must be contrasted to the relative high competition among lens companies to provide complete eyewear solutions to the ECP and ophthalmic practice or group and how that is an investment of another kind. The point is being—or trying to be—a little bit of both soon can be the most costly decision. **OT**

## author info

### Steve Swalgen

is national director of Lab Business, Santinelli International, Hauppauge, NY. Swalgen also is an advisory board member of the Optical Laboratory Association (OLA) and has developed and presented seminars on lens finishing automation and technology trends at each OLA annual meeting since 2004. He has written previously about optical labs and lens dispensing for *Ophthalmology Times*.