DISRUPTING the DISRUPTORS

BY SHEILA QUIRKE

dis-rupt (verb): *to interrupt, by causing a disturbance or problem; to drastically alter the structure of something; upset, obstruct, impede, interfere with, distort.* Strong words, but most optometrists can relate. The word "disruptive" is accurate when describing the growth of online optometric services.

It started as a commerce venue shift- retailers offered discounted eyeglasses and contacts via the Internet. Disruption has now morphed into online refraction being widely available to consumers who can access a new prescription without leaving home. That is some *Star Trek* level technology!

The American Optometric Association takes a strong stance against these innovations due to how they can affect patients' long-term health. "An online eye test that results in a contact lens and eyeglasses prescription may give patients a false sense of security, potentially delaying sight-saving care," says the AOA. "While there may be fine print disclaimers that say these apps do not replace comprehensive eye examinations, they may still misleadingly provide patients with a peace of mind that they received care." Regardless of risk, patients are embracing these services. Disruptive startup technology is here to stay.

So, what to do and how to adapt? ICO-trained doctors are at the forefront of these questions. Former ICO resident Dr. Ryan Corte is the founder of IntroWellness.com. This resource website produces short video clips that simplify health and wellness information for consumers. Dr. Corte believes these disruptors clearly understand how their presence impacts optometrists. "They know exactly what they are doing by trying to disrupt the process of refraction. It's not going away. We must educate our patients to the fullest degree about what ODs provide that is different, and be there for them if they discover what they're being provided online falls short."

Dr. Stephanie Messner, Vice President and Dean for Academic Affairs, states, "We must prepare our students for a future in which data collection is not the most important aspect of what they do." Instead, emerging tech tools can be used as one step toward a larger mission- "to solve their patients' problems in the most efficient way."

To do that adequately, it is important to better understand how online disruptors work. Here are the basics for a few, including what they provide, what they don't provide, and who they are targeting with services and marketing.

Opternative "The eye exam has evolved."

Chicago's homegrown disruptor, Opternative, was founded in 2012 and began offering online refraction in 2015. Last year, it established an alliance with 1-800-Contacts. It is currently active in 37 states and provides prescriptions using board certified ophthalmologists. Patients must be between 18-55 years old and state they are in good health via self-report. Online refraction is done at home using a computer and smart phone app, with a prescription then e-mailed to the consumer.

EyeNetra "Refraction mobilized."

EyeNetra was developed as a med-tech project at the MIT Media Lab. It is a "suite" of portable refraction tools for use by consumers under the "supervision of an eye care professional." The tools are transported to schools, businesses, correctional institutes, missions, rural areas, and mobile clinics. The equipment, including an auto-refractor, auto-lensometer, and handheld phoropter, is powered by a smart phone app. Data is transmitted to a proprietary, cloud-based system. Prescriptions that are generated can then be sent directly to a consumer's phone. More than 150,000 eye exams using the technology have now been logged.

Smart Vision Labs "Grow your business with optical telemedicine."

The objective of Smart Vision Labs is to connect brick and mortar optical stores with ophthalmologists via technology. They advertise a five-minute vision test and prescriptions for customers within 24 hours, accessible to patients via a secure online portal. The vision test uses a smart phone app that scans the eye with "wavefront technology," and includes photos taken of the eyes for remote review by ophthalmologists. All of this is overseen by a "normal employee," which one can assume is not a doctor of optometry. The company's website emphasizes lower costs for eye care professionals and increased sales, improving a return on investment. It boasts that using the technology eliminates the need to find or pay for doctors on-site.

Warby Parker "...founded with a rebellious spirit..."

Packaging itself as the disruptor with a heart of gold, Warby Parker hit the internet in 2010. They have carved out a market by offering affordable and fashionable frames that customers can select online, then try on in the comfort of their own home. The company both designs and produces their product. Ironically, the brand now has a growing brick and mortar footprint, with 58 locations across the US. This year, a new app has been rolled out called Prescription Check, which provides online refractions and is currently available in ten states. The home-based exam takes twenty minutes using a computer and smart phone, but is only available to consumers who self-report being between 18-50 years of age and who do not require reading glasses or progressives.

2020Now "The doctor is always in."

2020Now offers fifteen-minute exams using HD video conferencing and ophthalmologists. Patients are assisted with onsite devices like auto-refractors, auto-keratometers, and auto-lensometers. The collected data is transmitted to a remote technician who then performs subjective refraction and vision analysis tests, via teleconference. All the collected information is sent electronically to an ophthalmologist, who then sends a signed prescription within minutes. The goal is for any brick and mortar store that engages the company to then capture that patient and sell them eyeglasses.

Disruptors rely heavily on ophthalmologists. Ophthalmologists have the legal capacity to write prescriptions across state lines that optometrists do not, leaving optometrists vulnerable. That regulation is a tough nut to crack. In response, the AOA supports telehealth, "a rapidly-evolving tool for the delivery of health information and services." They believe that "eye and vision telehealth services, when used appropriately, can serve to improve patient coordination and communication among and between doctors of optometry and ophthalmologists, as well as other primary care or specialty care providers."

In addition to following AOA recommendations, ICO alumni are using a three-pronged approach to disrupt the disruptors. They engage in advocacy to lobby for favorable legislation, exercise education and top shelf customer service to attract and retain patients, and provide the latest technologies.

Abby Jakob, OD '14, is the owner/operator of EYES, a practice in Ontario, Canada. Dr. Jakob provides personalized care to patients ranging in age from infants to centenarians. She is passionate about pairing state-of-the-art technology with an awareness of specialized needs. "Technology helps me provide the most thorough exam possible, and by pairing that with patient education, my patients understand they are getting a compassionate and caring doctor."

For Dr. Jakob, that means providing a welcoming and friendly environment, having equipment that is wheelchair accessible, and making certain her patients "feel like gold." She has had tremendous success targeting those patients most readily served by online disruptors - Millennials. She uses social media to highlight her fresh product line and well-appointed office via Instagram and Facebook, which attracts younger patients.

Is Dr. Jakob concerned about the growth of online refraction? No. "There is no way to integrate a patient's lifestyle or habits into an online exam. The prescription provided may be crystal clear, but still not right. There is no substitute for a professional asking the right questions and reading the patient as they are examined." Dr. Jakob acknowledges it may be easier for her to adapt as a new OD who appreciates that older patients require a more traditional approach while her younger patients are comfortable with modern technology and different means to communicate with her. "People need options."

The reality of patients exploring options like online vendors is the elephant in the room Melissa Spaulding, OD '15, is never afraid to address with her patients. As a provider at

Front Range Eye Health Center in Colorado, Dr. Spaulding never shames a patient who requests a written prescription. "We are doctors of optometry, not salesmen. My number one goal is education. I check for diabetes and glaucoma, and ask about dry eyes and allergies- things many patients never think to bring up, but have a lot of questions about. I want to capture 100% of my patients with a more thorough eye exam."

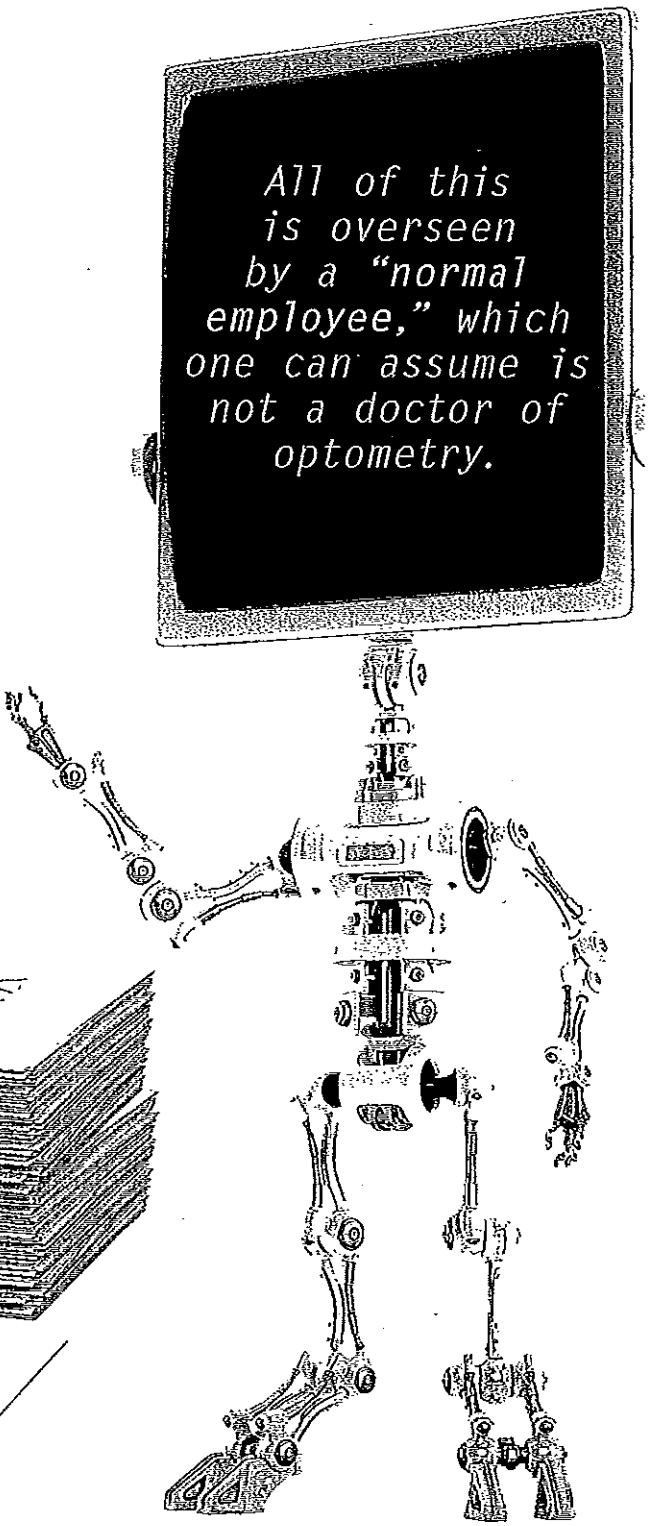
Dr. Stephanie Messner agrees with this strategy. She hopes ICO students and alumni will "fully participate in medical optometry and vision rehabilitation so that their practices aren't solely dependent on refractive eye care." A practice with multiple services and specialties will adapt and survive when the marketplace changes.

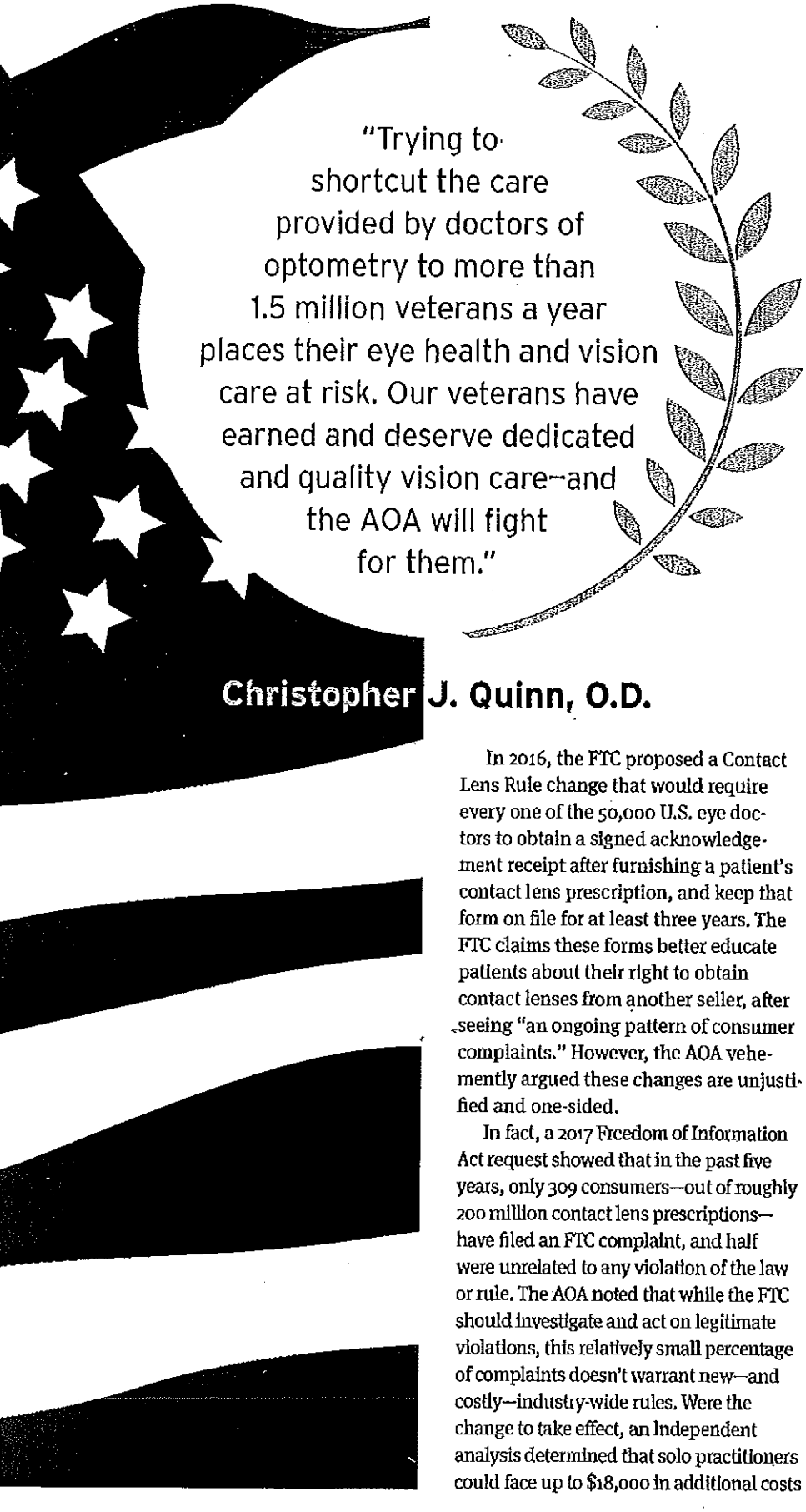
Ryan Ames, OD '07, is a strong advocate for, well, advocacy. Through his work at ForeSight, LLC based in Wisconsin, Dr. Ames has seen the benefits of state and national associations. "Optometrists must get involved. Donations to both the state associations and the American Optometric Association PAC are crucial. If every OD gave just $50 a month, we would have enough funds to fight. Industry forces are coming armed with millions of dollars. We need the same arsenal."

Dr. Ames believes focusing on education and technology enables patients to ultimately become better advocates for themselves. "We must focus on telling patients why they need to see us routinely. As we examine the eye, we need to tell them what we are looking at and why. Then, if the patient does consider an online refraction, they will at least be educated on what is missing when they do it."

Patients take notice of changing technologies, too. Dr. Ames notes, "When we are spinning wheels on the same black instrument from the 1950s, they will start to wonder why we are still using it when other technology is available. Marketing is a matter of perception, not reality. Even if both instruments produce similar results, they look very different. All the patient knows is that when they went to the optometrist, they got a new prescription. And when they did the exam in their kitchen, they got a new prescription."

Optometrists must cast a brighter light on what the profession uniquely provides. The AOA "will continue to hold companies accountable for any claims they make that potentially put patient health at risk." While they do, know your value and don't be shy about sharing it. Use the tools available to you: advocacy, technology, and the expertise to provide patients with the best care available to them. No app in the world can replace that.





"Trying to shortcut the care provided by doctors of optometry to more than 1.5 million veterans a year places their eye health and vision care at risk. Our veterans have earned and deserve dedicated and quality vision care—and the AOA will fight for them."

Christopher J. Quinn, O.D.

In 2016, the FTC proposed a Contact Lens Rule change that would require every one of the 50,000 U.S. eye doctors to obtain a signed acknowledgement receipt after furnishing a patient's contact lens prescription, and keep that form on file for at least three years. The FTC claims these forms better educate patients about their right to obtain contact lenses from another seller, after seeing "an ongoing pattern of consumer complaints." However, the AOA vehemently argued these changes are unjustified and one-sided.

In fact, a 2017 Freedom of Information Act request showed that in the past five years, only 309 consumers—out of roughly 200 million contact lens prescriptions—have filed an FTC complaint, and half were unrelated to any violation of the law or rule. The AOA noted that while the FTC should investigate and act on legitimate violations, this relatively small percentage of complaints doesn't warrant new—and costly—industry-wide rules. Were the change to take effect, an independent analysis determined that solo practitioners could face up to $18,000 in additional costs in the first year, while multidisciplinary practices could face up to $75,000.

"Our regulatory agencies should take a closer look at those online contact lens retailers who are subverting the current laws instead of supporting more unnecessary bureaucracy that will put further burden on community, small-business health care providers," Dr. Quinn says.

Following AOA on Capitol Hill, nearly 60 House members signed a bipartisan letter led by Reps. Leonard Lance (R-N.J.) and Bobby Rush (D-Ill.) urging the FTC to reconsider the proposal, which was due to the determined advocacy of thousands of AOA doctors and students.

As of August, AOA anticipated FTC action was imminent and continued to educate lawmakers about not only the regulatory burden this change placed on small-business owners, but also the lack of accountability on the part of contact lens sellers who sidestep the law and rule altogether.

"The Federal Relations Committee believes that the FTC has not focused enough on the violations of the Contact Lens Rule by lens sellers," Dr. Newman says. "We will continue to work with the FTC and Congress to make sure this bad idea does not become a final rule."

Upholding 'one standard of care'

Telemedicine can play a beneficial role in supplementing access to in-person, comprehensive eye health and vision care, but when it crosses the bounds of replacing an already high standard of care, patients aren't getting what they're billed. So, when the Department of Veterans Affairs trialed a telehealth vision screening program, the AOA spoke against the subversion of quality care.

Launched at the Atlanta VA Medical Center in 2016, the "Technology-based Eye Care Services" (TECS) program sought to provide vision and eye disease screenings to veterans living outside the footprint of a full-service VA facility as part of their local primary care visit. However, such services were performed

by an ophthalmic technician, and might generate a refractive prescription based solely on an auto-refractor reading.

Although the AOA commends the VA's efforts to expand veterans' access to eye and vision health care, the TECS program falls well short of the VA's guarantee of "one standard of care." And it wasn't only the AOA and the Georgia Optometric Association (GOA) who thought so. Senator Johnny Isakson (R-Ga.), chairman of the Senate Committee on Veterans' Affairs, called into question the program in a letter to VA Acting Secretary Robert Snyder this past February, reinforcing an earlier letter issued from other members of Congress.

"I am concerned that the TECS program is offering a disparate, and, in my opinion, a reduced level of care for some veterans, particularly rural veterans, which does not conform with existing VA policies," Sen. Isakson's letter reads.

"With doctors ready and able, I question why TECS screenings are being deployed in (Georgia), and soon elsewhere, and tested on America's veterans."

That's precisely the message echoed during a roundtable briefing on the U.S. Capitol grounds on June 21. Titled, "Veteran Vision: A Discussion on the Importance of Eye Health Care for America's Veterans," the briefing included AOA; the Armed Forces Optometric Society; the Association of Schools and Colleges of Optometry; AMVETS; the Blinded Veterans Association; the Vietnam Veterans of America; Sen. John Boozman, O.D., (R-Ark.); and Rep. Julia Brownley (D-Calif.); and featured a brief visit by Sen. Jerry Moran (R-Kan.), chair of the Senate VA appropriations subcommittee.

Overwhelmingly, advocates and thought leaders spoke in support of making sure veterans received the care they had earned, and importantly, that discussion later resurfaced in a hearing of the Senate's VA appropriations subcommittee with VA Secretary David Shulkin. There, Sen. Boozman raised concerns that the TECS program was providing a "Third World experience" to veterans.

"But I really think you ought to look at the way eye care is being delivered and put the technology in the hands of the optometrists, the ophthalmologists," Sen. Boozman commented. "They're in place, and again, give them the support staff and then they will be able to see more patients in an effective manner and cut out all this other stuff. Because we really do have some problems in that area."

Dr. Quinn noted after the roundtable briefing: "Trying to shortcut the care provided by doctors of optometry to more

AOA Executive Director Jon Hymes provides an update on AOA's advocacy efforts during the House of Delegates at the 2017 Optometry's Meeting® in Washington, D.C.

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State advocacy in review

Optometry is a legislated profession, and as such, those laboratories of democracy—states—prove a bellwether for the advocacy challenges to come. This past year, state affiliates encountered legislative and regulatory trials that might help blaze a path toward increased patient access and safety, solidifying the quality care that doctors of optometry provide. Among states' 2017 legislative sessions, the AOA's State Government Relations Center (SGRC) tracked a total of 891 bills involving optometry; not all came to fruition, but a handful represent significant victories for patients and the profession.

Lessons in scope

Concerted, grassroots advocacy efforts made possible expanded or revised scope of practice laws in three states this session that ushered in more comprehensive, more accessible patient care.

In Alaska, a 2014 upscheduling of hydrocodone by the FDA and Drug Enforcement Agency had the unintended consequence of limiting doctors' of optometry prescribing authority. That simple regulatory action triggered a heated legislative debate, one that ultimately would prompt Alaska's doctors to later roll out a board autonomy bill.

Introduced and signed into law this session, that bill granted the Alaska Board of Examiners in Optometry the authority to independently regulate development of the profession commensurate with what is taught at accredited schools and colleges of optometry, and eliminated the need for optometry to petition the Alaska State Legislature with each advance in optometric education or technology. The law represents a windfall for patient access across the Frontier State.

"Area-wise, Alaska is the largest state in the union—we're very rural—and there are many parts of this state that are not served by ophthalmologists, but by optometry," says Paul Barney, O.D., board chair and 2017 AOA Optometrist of the Year. "This is about accessing care so patients don't have to travel hundreds of miles to get to Anchorage; they can have care delivered by a well-trained optometrist."

Currently, this new law does not change the scope of practice in Alaska, and current regulations governing the practice of optometry are still effective. However, a new law in Georgia did affect scope of practice for patients' benefit.

Georgia now allows doctors of optometry to perform limited injections to areas near the eye, becoming one of a dozen states to currently permit such procedures. Ben Casella, O.D., GOA president, says it's important for state law to progress as the training for doctors of optometry does the same with advancing technologies and care that could greatly benefit patients.

"This measure being signed into law supports our position that Georgia's doctors of optometry are highly skilled, well-trained and experienced medical professionals who are working to give their patients access to much-needed eye care services," Dr. Casella notes.

And in Texas, a new law also granted doctors of optometry greater prescribing privileges, along with several other changes. Per state law, the Texas Optometry Board and several other medical boards came up for routine review under the Texas Sunset Act to remain operating; however, Texas required a special session to consider such approvals before sending these measures to the governor's desk. That signature came on Aug. 11, and with it, approval of the Sunset Commission's recommendations to require doctors of optometry to check the state's Prescription Monitoring Program database before prescribing controlled substances. Additionally, the recommendations require the board to develop guidelines for responsible prescribing of controlled substances.

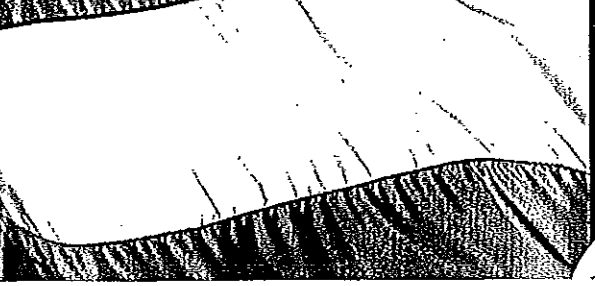
Reining back oversold technology

When it comes to technological advances, the entrepreneurial "because we can" shouldn't take priority over commonsense public health and safety. Optometry must draw a line between technologies that improve patient care and outcomes, and those that ultimately act as a barrier to care.

While nascent devices—such as kiosks, app-based autorefractors or online vision tests—appeal to consumer convenience, AOA and state associations contend there are severe pitfalls in separating refractive tests from regular, in-person comprehensive eye examinations. And states are ensuring these potential hazards go no further.

Four states—Connecticut, New Jersey, Virginia and Wyoming—passed some form of patient protection law this session that upholds the standard of care afforded by an in-person examination and establishes commonsense guardrails for emerging technologies, including telehealth.

"We have seen an increase in patient protection legislation over the past few years with well-funded opposition on the other side," says Deanne Alexander, O.D., chair of the AOA's State Government Relations Committee. "We also are



continuing to see telehealth legislation being introduced throughout the country. We need to monitor these bills closely to watch for opportunities where optometry can be included safely and appropriately.

"Forward-thinking patient-protection legislation that allows for changes in technology and health care will be important as new apps and technologies are continually popping up—not only are they providing inferior care, but some provide no care at all."

In Connecticut, optometry faced severe opposition over a bill that prohibited the disbursement of a contact lens prescription based solely on a remote refractive test, such as those found on a smartphone app or device. Signed into law and taking effect in October, the law stipulates that an in-person evaluation and eye examination must be conducted before an initial prescription or first renewal can be issued.

Addressing telehealth concerns, the New Jersey Society of Optometric Physicians stood firmly on bill language that specified any health care provider wanting to participate in a telemedicine program must not only be licensed in New Jersey, but also meet the same standard of care as an in-person setting. Furthermore, online apps or services cannot rely solely on refractive results to furnish a prescription as that is only one element of a comprehensive eye exam, and would otherwise violate the standard of care provision.

But it's not only about fighting to pass legislation; it's about defending it, too. That's the position that the Indiana Optometric Association (IOA) found itself taking when its comprehensive telemedicine law—an IOA-backed, 2016 bill that prohibited ophthalmic devices from being prescribed by purely electronic means—came under fire early in the 2017 session.

Opponents pushed to overturn those safeguards, but IOA members rallied. Again, they educated lawmakers on the standard of care afforded by an in-person, comprehensive eye exam, and argued that online services couldn't detect serious ocular conditions and diseases, effectively delaying timely care.

"Any legislative battle can be hard on any level, but states need to be prepared," Dr. Alexander says, "The opposition has a lot of money and effort, and optometry must be ready from the grassroots level all the way up to our lobbying efforts."

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