**Review** of Optometric Business

# Telemedicine:
## Tapping Into a Megatrend



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**OPTOMETRY'S CRASH COURSE IN TELEMEDICINE**

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## INTRODUCTION

# Lessons Learned from Optometry's Crash Course in Telemedicine

**By Mike Rothschild, OD, Professional Editor**

## " Telemedicine has advanced 10 years in the last six months."

"Telemedicine has advanced 10 years in the last six months." As an active member of the American Telemedicine Association, I've heard that mantra lately from many of the experts.

This Special Report will show you that this is particularly true in the optometric profession. In the last year, we have gained clarity and improved on the wide variety of care that telemedicine can provide our patients. With no other options available, many of us were forced to "dabble" in telemedicine to provide the care our patients needed.

Going forward, some of us have maintained those modified care delivery methods as a part of our "new normal." In fact, two-thirds of those currently using telemedicine plan to continue using it post-pandemic, according to a January 2021 survey by Jobson Optical Research.

Using telemedicine for optometry is, however, a balancing act of finding and using what's good for the profession and our patients with systems that may be from those who wish to sidestep necessary care delivery to simply sell products. This Special Report aims to provide a stronger understanding of how the technology can offer amazing opportunities along with the credible threats that do exist.

The conversation, the evolution, and the development of telemedicine in optometry will continue for generations. The young doctors and current students will be instrumental in determining the implementation of this communication technology on our profession, laying the foundation that will impact our future.

**Mike Rothschild**
*Leadership OD*
*Professional Editor*

As this conversation continues, it is critical that we have a basic concept of what we are discussing. Surprisingly, survey data show that most optometrists still don't know the difference between "synchronous" and "asynchronous" telemedicine. This is a critical distinction determining whether or not the patient and doctor communicate with each other, or not. To help educate practitioners about this and other important distinctions regarding telemedicine, this Special Report classifies various types of telemedicine for eye care.

Also included in this Special Report are a list of telemedicine technologies specifically for eye care that can improve your ability to connect with your patients. Before deciding which of these solutions will help you most, though, you first must understand your goals and your priorities.

Some solutions focus on being "robust" and are rich in features connecting, testing, educating, billing, and documenting your patient interactions. Others serve

the primary goal of quickly, easily connecting you to your patients in a safe, secure manner. You can only know which is best for you if you have first explored your ultimate goals.

Remember my **Rule #1** when delivering quality telemedicine: *The doctor must always be involved in all clinical decision-making after carefully considering all available information in the best interest of the patient.*



*photo courtesy of Advanced Ophthalmic Solutions*

The professional organizations that exist to enhance our profession and educate our future colleagues are tasked with walking the fine line between supporting the opportunities presented by telemedicine while protecting us against potential threats. Establishing policy and guidelines is more challenging on this quickly evolving topic. I am personally grateful for the leaders of our profession as they navigate these tumultuous topics.

Regulations continue to evolve as well. Third-party payers reacted to the urgent need to offer telemedicine, and most immediately waived any restrictions. Now, with fresh lessons from this forced experiment, policy makers and payers are also redefining themselves. To help understand all these sudden changes, this Special Report provides an update on current policies and what to expect moving forward.

The good news is that there are success stories from every area of the country. Rural practices are able to deliver comprehensive exams to patients even when the doctor is away. Big city practices are providing exams for walk-ins independent of the availability

of the on-site doctor. Busy, crowded practices are implementing social distancing by performing follow-up visits via a Virtual, At-Home, Office Visit (VAHoV).

Low vision and vision therapy services are routinely being provided to patients in their homes. One of the biggest benefits of this method is seeing the patient in their own environment, further enhancing the personalized nature of this care. Learn from this Special Report how using telemedicine to provide these services is being implemented and taught to the next generation of ODs.

As optometry continues to evolve as a profession, our driving motivation has always been to serve our patients' needs. The incorporation of telemedicine into our profession is no different.

While there seems to be light at the end of the COVID tunnel, the pandemic has certainly accelerated our experience and taught us a great deal about how we can continue to move forward providing the optimal care using the latest telemedicine technologies.

Let's not waste the lesson . . .

TERMINOLOGY

# Speaking the Language of Telemedicine: Synchronous vs. Asynchronus Care

**By Mike Rothschild, OD, Professional Editor**

> "We are in the middle of a learning curve in which even those who use the technology are not familiar with the correct terminology."

As in any discipline changing as quickly as telemedicine, the language that we use to discuss it adapts quickly, making it difficult to keep up. There are some terms becoming standardized that those in the conversation should understand.

Unfortunately, we are still in the middle of a learning curve in which even those who use the technology are not familiar with the correct terminology. For example, according to a January 2021 Jobson Optical Research survey of eye care professionals, 58 percent of those currently using telemedicine do not understand the difference between "synchronous" and "asynchronous" care. Among the goals of this Special Report is to educate those users about this and other terminology. (For more on telemedicine terminology, see the glossary on page 28.)

## SYNCHRONOUS CARE

Put simply, synchronous care is when the patient and provider can see and hear each other in real time. Synchronous telemedicine visits must include a live, audiovisual connection where the patient and doctor can talk to each other. The provider can clarify the complaint or history findings, and the patient can ask questions.

One example would be a neurologist specializing in stroke intervention remoting into a rural emergency room to consult with a patient exhibiting stroke symptoms.

## ASYNCHRONOUS CARE

Asynchronous visits are also known as "store and forward" and do not involve patient/provider communication. Test results or other data are uploaded for a provider to evaluate and report findings.

This is a common practice for radiologists who see x-rays, CT scans, or MRIs and report their findings. This analysis is used by a variety of specialists to actually interact with the patient. In eye care, asynchronous care is being used to "read" retinal images for diabetic patients unable to receive complete eye exams.

Because it is necessary to further categorize the different types of synchronous telemedicine in optometric care, TheTeleOp released a white paper to explain the current terms being used. Shared here, this document will have to be consistently updated as the technology, our methods, and the challenges evolve.

## Telemedicine in Optometric Practice – Varieties of Synchronous Care

Supportive Care – conduct portion of in-office exam virtually

1. **Increased efficiency**
2. **Reduced exposure time**

**Supportive Care:** Asking a patient to complete an online history form has been commonplace for some time. But by simply reviewing the history with the patient virtually, it has become an entry level service of telemedicine. As we re-open our practices with restrictions, many practices are incorporating this "telehistory" to reduce the amount of time spent inside the practice. This method could also be considered to help alleviate

patient flow problems once normal returns. The caution is to make sure the documentation is good enough so this history is not conducted twice.

## Alternative Care – Virtual At-Home Visit (VAHoV)

1. **Problem-Focused Medical Examination**
2. **Follow-Up Care**
3. **Contact Lens Progress**
4. **Triage Care**
5. **Quicker Response Time**
6. **Eliminated Exposure**
7. **Alternative To "No Show"**

Alternative Care: Providing Virtual At Home Visits (VAHoV) to patients became a dominant method of providing optometric services during the height of the COVID-19 pandemic. Some studies show that 73 percent of all physicians provided their first telemedicine visits during this time. A variety of platforms were tested due to relaxed restrictions, and telemedicine proved to be an effective way to evaluate the urgency level of a patient's need. In many situations, good care was provided by optometrists during those unprecedented times.

 VAHoVs can continue as an avenue for providing good care in many "normal" optometric situations. Under good direction, a patient can capture quality images of the eye, in real time, and effective evaluation can be achieved for a wide variety of visits. Some optometrists will conduct dry eye follow ups, contact lens progress exams, and other types of visits virtually, and I expect many "emergency" visits will begin taking place via a VAHoV.

## Consultative

1. **Connection With Specialist**
2. **May Involve Asynchronous Care**

Consultative: When you ask a specialist to look at a visual field, that is asynchronous telemedicine. If that specialist remotes into the room with you and talks to your patient, it is now synchronous. This is frequently used in the medical field and can become a significant component of optometry.

## Remote Monitoring

1. **IOP Measurements From Home**
2. **Single Use**
3. **Monitoring Long Term**
4. **Couple With VAHoV**
5. **Eliminated Exposure**

Remote Monitoring: At-home IOP measurement in which the data is uploaded to the cloud is now a reality. We expect to see more legitimate at-home testing that can more closely evaluate pressure, visual acuity, dryness, and other significant factors. This will give us an opportunity to monitor at-risk patients like never before.

We also expect a fair number of illegitimate players in this arena. The best way to ensure that quality care is provided through telemedicine is to offer care that can be trusted.

## Comprehensive Exam with Distance Provider

1. **Conducted In-Office**
2. **Testing Done By On-Site Technicians**
3. **Uploaded Digital Data/Images**
4. **Online Refraction**
5. **Online Doctor/Patient Interaction**
6. **Exposure To Fewer People**

Comprehensive Exam with Distance Provider: The ultimate in telemedicine services for optometry is to provide comprehensive exams with a distance provider. Delivery of care to the level that we have grown accustomed requires a skilled optometrist *and* adequate equipment. As much as equipment has advanced, the optometrist still must make clinical judgements based on *all* the available information.

This level of service is proving to be capable of providing quality, highly accurate care that is very well received by patients. It can provide a high level of flexibility in a variety of practice settings.

Telemedicine in optometry can take many approaches and can be customized to the individual needs of a particular patient or practice. The factors that will affect the decision to offer these services will depend on the doctor's ability to comfortably make sound clinical decisions in the patients' best interest.

PRACTICE MANAGEMENT

# Telemedicine: Instant Implementation, Long-Term Solution

**By Timothy Bossie, OD, FAAO**

"We view telemedicine as one more patient-care tool in our arsenal and will utilize it even after full-scope in-person care returns."

**Timothy Bossie, OD, FAAO**

If necessity is the mother of invention, 2020 was the year that bore the greatest opportunities to maximize those creative powers. In the face of minimal but constantly evolving information about COVID-19, health care providers had to adjust immediately to care for their patients and keep their practices afloat. Optometry, like most fields, turned to technology.

## Two Days To Telemedicine

At **NECO Center for Eye Care,** we shut down for non-urgent care on March 17, 2020, and had telemedicine services up and running within two days! That meant temporarily suspending routine appointments at the two academic centers where we provide comprehensive vision services.

NECO Center for Eye Care had previously explored telemedicine as an option prior to the pandemic, but it was the shutdown, individuals taking initiative, and creating a plan that allowed us to launch a service within just two days of closure.

At first, our goal was to ensure that we provided care to patients with urgent issues. Yet, as our practice and patients became more exposed to telemedicine, the clinics' goal started to shift toward continuing treatment for non-urgent patients with time-sensitive needs, such as vision training or low vision care, and to expand our other services as the pandemic continued. Safety for both patients and providers was a priority. Telemedicine became the obvious solution for both clinics and patients.

## The Rise Of Telemedicine

Telemedicine is not a new concept. As early as 1959, doctors used a two-way concept of video-audio to care for patients. Although telemedicine has been used in a variety of health care settings for decades, it wasn't until the COVID-19 pandemic that video conferencing in health care (as in every sphere from work to school to socializing) really took off.

The advances in technology and internet accessibility enabled continuity of care despite mandated closures and safety concerns. With COVID-19, for the first time on a mass scale, patients were virtually connecting with doctors, from their own homes and on their own personal devices. As telemedicine technology has advanced so quickly in such a short time it is likely that patients are going to continue to drive the demand more than ever.

## Top Incentives For Telemedicine

Here are some reasons to consider expanding telemedicine services in your clinical setting:

- **Access.** Making care more accessible is part and parcel of telemedicine's safety and convenience. A practice that offers multiple streams of patient care access can deliver care more effectively, making it more likely to gain and retain patients. We have found that leveraging more than one telemedicine platform has allowed us to customize telemedicine toward specific patients, further improving our access.

- **Continuity.** Vacations, bad weather, and traffic are just a few reasons patients miss appointments, which can disrupt progress and schedules. Offering telemedicine services means more consistent care and fewer no-shows and late arrivals. During a recent snowstorm in the Northeast, a vision therapy provider and NECO students were able to provide telemedicine care to a full schedule of patients, even with the clinic being closed.

- **Safety.** Practices may not be operating at full capacity for some time yet, and high-risk patients may still want to limit exposure. Even when the current pandemic is over, a subgroup of patients may prefer safer alternatives to in-person visits.

- **Convenience.** Our patients have consistently expressed their preference of joining a telemedicine appointment from home rather than driving from another state or spending an hour driving in city traffic. Telemedicine has been convenient for patients throughout the entire clinic, especially for those with transportation issues.



The greatest acceptance and growth of telemedicine is with our low vision and vision therapy specialties.

## Key Considerations

We've continuously fine-tuned our telemedicine services as we gain experience and incorporate feedback from patients and providers. A year in, here are some of the things we think are important to consider.

**Get everyone on the same page:** If your front-desk staff isn't buying in, or a provider isn't comfortable with technology, telemedicine services won't run smoothly. Offer training sessions, have a point of contact who can answer questions and help

## 5 Telemedicine Lessons Learned

**1. Keep up on emerging tools.** At the New England College of Optometry, we were not actively using telemedicine in patient care prior to our closure in March 2020, although we had developed previous relationships with telemedicine companies in order to better understand and engage their software platforms. In preparation for the launch, we continued our conversations with companies and reviewed the software within all of our departments, including front desk, billing, and providers.

**2. Implementing workflows and training is a key first step.** It was imperative that all staff had a baseline of training on telemedicine so that they were knowledgeable and invested in the new program. In the end, our final workflow included using telemedicine software mostly for its secure audio-video connection while maintaining our previous in-person workflows for scheduling, eligibility, and documentation within the EHR platform.

**3. Prioritize patients based on potential success and need.** Our providers and staff reviewed the clinic's recalls in order to prioritize patients for telemedicine appointments who were already in some form of treatment process and were familiar with the activities and vision aids typically used in a session. A detailed accounting of our experience with these initial telemedicine patients can be found in **this article** in *Vision Development and Rehabilitation*.

**4. Continually evaluate what works and respond to feedback.** Telemedicine is also used for contact lens checks and urgent care evaluations, yet the greatest acceptance and growth is with our low vision and vision therapy specialties. This is likely due to a number of factors including the frequency of appointments, transportation to and from the clinic, vulnerable patient populations, and our ability to send equipment to treat patients directly to their home.

**5. Incorporate telemedicine into the care plan.** We view telemedicine as one more patient-care tool in our arsenal and will utilize it even after full-scope in-person care returns. Our most restrictive closures ended in May 2020, and we're currently operating in-person clinics at around 75 percent capacity. NECO Center for Eye Care is currently examining around 275 patients per month through telemedicine.

with glitches, and get everyone in the practice involved. Educate your patients about telemedicine, and ensure that staff feel comfortable enough assisting patients with understanding how to access their appointment.

**Billing and insurance:** It's critical to know which telemedicine services patients are eligible for in terms of insurance coverage. States and insurance companies all differ in this regard, and regulations seem to be constantly changing. Coverage information should also be easily accessible for providers delivering care via telemedicine. With all of the questions regarding telemedicine insurance coverage, NECO initially found it easier to integrate telemedicine into various self-pay patients and has since expanded to incorporate services for billing patients.

**Telemedicine software platforms:** Research which HIPAA-compliant platform is best for your practice and patients (many offer free trials so you can vet the program before committing). Telemedicine platforms have various strengths and weaknesses. We have found that having options has helped us meet the needs of our patients. Take advantage of the platform's training and assistance. Keep in mind that regulations concerning HIPAA and telemedicine have been changing, so make sure you, and your software, are current.

**Equipment and vision aids:** Besides a telemedicine software platform, computers, cameras, and reliable internet are all you need to conduct telemedicine sessions, for both provider and patient. Staff working off site should also ensure that they are using an encrypted device. In terms of ophthalmic equipment, any necessary vision aids used by low vision and vision therapy patients can be dispensed at an initial in-person appointment or sent directly to the patient's doorstep by a third-party company. Having the ability to send equipment to the patient directly has improved providers' ability to deliver care remotely.

**Understand the limits:** Telemedicine won't be appropriate all of the time for every patient, or even at all for some patients. Knowing how and when you can effectively use telemedicine as an alternative to in-office visits, and when you cannot, is key to successfully incorporating it into your practice.

**Additional benefits:** A series of articles in *Women in Optometry* details additional benefits of telemedicine, such as being able to see a patient's home environment or getting daily visual acuity measurements.

**Listen to your patients:** Patient input can go far in determining long-term improvements and viability of using telemedicine to complement or fully replace in-person visits. We have found that the benefits they get from removing the hassle of travel or missed appointments, while not sacrificing quality care, has been key to our success.

## Telemedicine Is Here to Stay

I view telemedicine as an enduring feature in the future of health care in general and more specifically in optometry. As patients and providers become more familiar and confident with its benefits, and telemedicine software continues to improve its user experience and capabilities, more practices will adopt this mode of health care delivery.

NECO students now use telemedicine as a routine part of their clinical training and expect to include it in their future careers. Organizations such as the American Optometric Association recently issued a new telehealth position statement, and state and insurance regulations are adapting to the technology.

Investment in innovation is always important in competitive industries; innovation that makes health care more accessible and convenient for both patients and providers is a win for everyone.

*Timothy Bossie, OD, FAAO, is Director of Owned Clinics & Outreach Services at New England College of Optometry.*

PRACTICE MANAGEMENT

# In Practice:
# Telemedicine Technologies In Action

**By Mike Rothschild, OD, Professional Editor, and Kristen Dalli, Managing Editor**

" Numerous optometry practices have incorporated increased levels of telemedicine into their optometric practices. "



*photo courtesy of Topcon Healthcare*

Many practices have utilized "supportive" telemedicine solutions to decrease contact and wait times for patients. Virtual check-ins, online forms, and patient portals are all processes that enhance an in-office patient experience. The lessons we are learning from these adaptations can certainly continue to improve the patient experience.

Beyond these supportive telemedicine solutions, numerous optometry practices have incorporated increased levels of telemedicine into their optometric practices motivated by a desire to take better care of their patients and preserve their relationships.

## COVID-Influenced Integration

Most recently, the COVID-19 pandemic has inspired many optometrists to institute telemedicine into their practice. This was the case with Mehrdad Saadat, OD, owner of Tulman Eye Group in Lithia Springs, Georgia, and the immediate past president of the Georgia Optometric Association.

"We see as many patients as we can and still have hundreds of patients on our waiting list. We have a small optical, and when all three doctors are seeing patients, we have no way to socially distance," said Dr. Saadat. This led to the decision to incorporate all follow-up visits to "alternative care" using Virtual, At-Home Visits (VAHoVs). These billable visits are done after regular, in-office care has ended.

"Using **Doxy.me**, the patient receives a text, and we are securely connected. We schedule them 15 minutes apart," Dr. Saadat explained.

Dr. Saadat is learning more about his comfort level in utilizing telemedicine in his busy, highly

medical practice. "I am not comfortable, yet, diagnosing a red eye via telemedicine. I am not sure that I can differentiate between a herpetic ulcer or uveitis. I am also not ready for comprehensive, refractive exams when I am not in the clinic."

However, his diabetic and glaucoma patients receive at least two visits per year, and at least one of those can be accomplished via telemedicine. This is where he orders his retinal scans, visual fields, etc. These tests are done on days that he is not in the office. His team of technicians does the testing and uploads the results for Dr. Saadat to evaluate. A VAHoV is scheduled to review the findings, adjust the treatment, and order any necessary follow-up testing. "The patients love it," said Dr. Saadat.

Kathy Shamblin, OD, practices in Shelbyville, a rural area of Tennessee, and has a passion for vision therapy. Prior to the pandemic, she added a remote examination service to her practice as a solution to her need for another associate doctor. "I realized that we didn't have room in our schedule to bring patients back for follow-up care. Do I try to hire an associate or utilize this service?" Since the practice was already equipped with modern diagnostic and retinal imaging equipment, she incorporated **20/20NOW.**

Luckily, the service was in place when she came down with COVID

and wasn't able to see patients for weeks. Her existing staff who knew the patients performed pre-testing as they always had and turned it over to the online doctors who reviewed the entire record and talked with the patient remotely.

Robert Spivack, OD, of Sterling Optical in Turnersville, N.J., started using telemedicine services from **EyecareLive** this past September to be prepared for another potential COVID-19 shutdown.

"I wanted to be prepared and have another viable option to see patients—whether for medical visits, contact lens follow-ups, or anything I don't think qualifies for an in-office visit but is more of a conversation with patients," he said. "I opted for EyecareLive because it allows me to do visual acuity tests, patients can upload images of their eyes, we can communicate verbally, and I can collect billing and insurance information as needed. It also allows me to see patients on my days off when I'm not in the office, and I can have true follow-up appointments, where I can talk to patients without it being inconvenient."

## Remote Comprehensive Exams

Harvey Moscot, OD, is the CEO of Moscot Optical, a fifth generation, family-owned optical brand based in New York with shops in cities

around the world. He also offers comprehensive exams with a remote provider using 20/20NOW to fill in the gaps when the doctor is not available on-site.

"The staff needs buy-in to embrace the technology to recommend it to customers," Moscot said. "It takes them off the sales floor, so they need to be incentivized somehow to make it work. The exam is very thorough and complete. It includes subjective refraction with an online technician, pressure reading, slit lamp, and retinal images, all reviewed by a licensed doctor."

For Kirk Lauterback, ABOC, COO of Shopko Optical, offering patients telemedicine services started before the COVID-19 pandemic. He explained that his business wanted to reach as many patients as possible, and by using **DigitalOptometrics**, they've been able to implement these technologies in nearly two dozen Shopko locations.

"At Shopko Optical, our priority is for patients to see an in-person doctor for comprehensive eye exams. However, in order to meet the needs of our patients wanting an additional level of convenience, we looked at multiple tele-optometric solutions," Lauterback said.

"We found that DigitalOptometrics offered a patient experience that was consistent with our philosophy.

We added tele-optometry to our first center in the fall of 2019 and since then have added the service to 20 additional centers. This system provides great technology along with caring refractionists and optometrists. The set-up and support by the DigitalOptometrics team has been outstanding as well."

Tamara Hill-Bennett, OD, of Logic Eye Care Inc. in Philadelphia also started using telemedicine at the start of COVID-19 for her mobile optometric practice. She explained that EyecareLive answered her most important question: How can we effectively take care of the population we serve?

After "a webinar about EyecareLive, I knew it was the right fit," she said. "As soon as I heard the ability to have patients do in-home eye exams, I didn't need to hear anything else. Being a mobile eye care service, we had used other technologies before, but EyecareLive came to us at the perfect time during the pandemic. I needed to see how I could offer my patients a safe, effective way of administering an eye exam. We're still bringing the eye doctor's office to the home; this is just another way to do that."

Optician Kevin Greene manages North Country

Optical with George Mitsoglou, OD, in Plattsburgh, New York, where they incorporated remote exam capability using 20/20NOW to increase coverage for this well established, one-doctor, one-location practice. He explained that the exams are very comprehensive from the patients' perspective, and acceptance has been very high. Explaining this new type of exam to his patients proved challenging, so they demonstrate it instead. "Once patients experience the technology, interact with the technician, and ask the online doctor any questions, they love it."

Dr. Mitsoglou said that his primary motivation for adding this technology was to allow him to work on more administrative tasks



*photo courtesy of 20/20NOW*

without sacrificing patient revenues. "Additionally, as I get on in years, I feel the need to spend less time in the office. So, we have been using it while I am out of town."

## Perfect for Rural Practices

Finding the right associate to join a practice has been a challenge in rural optometric practices for years. Dr. Mitsoglou as well as Dr. Shamblin both expressed the long struggles of getting new ODs to visit their practices, consider an associateship, or even fill in. Telemedicine enables them to add associates without requiring that they be on-site.

Kent Iglehart, the General Manager at Dr. Tavel Family Eye Care, which has 22 locations across Indiana, explained that he also incorporated telemedicine technologies to provide eye exams to those in rural areas where in-person exams are harder to access. Iglehart said that DigitalOptometrics has helped them expand their reach and get patients in sooner.

"We started using DigitalOptometrics for two reasons: one was to be able to add doctor coverage where it's not readily available, like in rural areas where it's hard to find a doctor, and the

*photo courtesy of DigitalOptometrics*

other reason was to try to create capacity expansion in an office," Iglehart said. "In our rural office, it's absolutely allowed us to be able to give that space more virtual coverage than if it was a traditional, in-person eye exam. It also allows us to get patients in sooner; we tell patients they can wait a month for an in-person exam, or we can get them in within a week if they book a virtual appointment"

As the technologies progress, Iglehart believes that telemedicine will continue to serve a key role for ECPs.

"I think the technology is really neat," he said. "I personally believe that this is the future in terms of being a meaningful part of how we practice. Not that it will replace in-person eye exams, but I think it will keep growing within our practice, and we'll be able to continue expanding the availability of care to patients who might otherwise not be able to get it."

## Telemedicine will continue to serve a key role.

Jay Wisnicki, MD, an ophthalmologist with Union Square Eye Care in New York City, believes that **Topcon's** latest telemedicine technologies can also benefit practitioners and patients in more rural areas.

"We've utilized Topcon's instrumentation for the last 10 years and began piloting their latest telemedicine technologies over the last six months," Dr. Wisnicki said. "In an office like ours, a large practice in the middle of Manhattan, we typically see a lot of patient turnover. In a practice in a rural area that maybe can't afford to have a full-time optometrist on staff, or where patients struggle to get appointments, Topcon's technology can be pretty valuable.

"With Topcon, patients are able to see a doctor from anywhere, and doctors can control the refraction system remotely from a web browser; that technology can be hugely beneficial."

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TECHNOLOGY

# Telemedicine: Technologies for Optometry

By Mike Rothschild, OD, and Kristen Dalli, Managing Editor

**Kristen Dalli,
Managing Editor**

Telemedicine in optometry has been rapidly evolving for several years. The pandemic has served to accelerate that growth, enticing many established industry partners to upgrade their services and products, and resulting in the creation of new companies to serve the sudden need for remote care.

Recent developments in telemedicine technologies allow us to serve our patients in ways that we have never been able to before. Unfortunately, though, these same developments can bypass the quality care our patients are accustomed to receiving by promoting inferior services directly to our patients.

When deciding to incorporate telemedicine into your practice, it is important to first decide what problem you want to solve. Delivery of a VAHoV (Virtual At-Home Visit) for follow-up care of in-office visits can be very beneficial for your patients but may not require adding a complex, robust system if many of the tools are already in place in your practice. In contrast, shifting your care to a more remote delivery system may require a vast investment in new equipment, new services, and new systems.

The ability to provide quality care is a professional decision that must be made with the patients' best interests in mind, considering all the factors and findings that affect each individual patient. To provide quality care, a connection between the patient and the provider must be established at some point. Telemedicine for optometry can offer synchronous care where the patient and provider are connected in real time, or it can offer asynchronous care where a doctor simply signs off without ever actually "seeing" the patient. These differences can dramatically impact your ability to deliver quality care, so be sure to know what you are getting into. The following telemedicine technologies are described and categorized to help you make the right decision.

## ELECTRONIC HEALTH RECORDS WITH TELEHEALTH

### Compulink

Compulink offers all-in-one EHR and practice management solutions, including a built-in telemedicine solution that allows the provider to conduct a video chat exam from anywhere. Compulink also offers MyEyeStore, an e-commerce solution that lets a practice sell products online, including contact lenses, dry eye solutions, and more.

### Eyefinity EHR

Eyefinity EHR has fully integrated telehealth capabilities. Providers can leverage their cloud-based optometric software to provide remote care for consultations, supervision, and medication management. Auto-coding helps ensure accurate billing and claims management. Soon, users will have the ability to expand practice reach and deliver personalized care with secure, HIPAA-compliant video chat functionality. Doctors who wish to perform a video visit are able to connect with their patient and document an exam simultaneously on the iPad app.

## SYNCHRONOUS PATIENT VAHoV APPS

### Doxy

Doxy.me is a telemedicine system that requires no downloads for patients, who can create a synchronous connection with their ECP via a specific URL. There is a free version available. Paid accounts offer extras such as text and email notifications and the ability to receive payments. Communications are encrypted, and the service is HIPAA compliant.

### ABB Optical/EyecareLive

ABB Optical and EyecareLive have partnered to create telemedicine services that are beneficial to both ECPs and their patients. EyecareLive's app allows patients to make appointments, communicate urgent care needs with ECPs after traditional practice hours, and

schedule video conferences for full eye exams. Additionally, the app can facilitate in-home screening tests for children with myopia or conduct contact lens fittings, and doctors are able to prescribe medications and send them to specific pharmacies. Recently, ABB and EyecareLive introduced an e-commerce platform on the app, which allows patients to purchase contact lenses that will be shipped directly to their homes using their insurance plans.

### Advanced Ophthalmic Solutions

AOS offers a software platform that can be used in a clinic or remotely. Award-winning objective grading and analytics make managing ocular surface conditions more effective. Analysis tools work on any images regardless if they are taken with a slit lamp camera or smartphone. Personalized reports can be

shared with patients or referring physicians. An imaging app allows patients to send images from home for remote monitoring or triage. ECPS can also have live, secure video calls with patients to make follow-up with dry eye and contact lens patients more convenient.

## ASYNCHRONOUS PATIENT CARE SYSTEM

### myVisionPOD

myVisionPOD allows a patient to get a new eyeglass prescription from a remote eye doctor in 15 minutes, and the results are integrated into an e-commerce portal for the purchase of eyewear. myVisionPOD is an on-demand, *refraction-only* service delivered via a remotely controlled video conference pod under the supervision of an optometrist or ophthalmologist.

## COMPREHENSIVE EXAM WITH REMOTE PROVIDER

### DigitalOptometrics

DigitalOptometrics offers users a digital platform to schedule fully remote, comprehensive eye exams at locations, days, and times that are best suited to patients' needs. The process begins with patients choosing an optical exam site and making an appointment. Upon arrival for their virtual appointment, patients input their medical history on a tablet, and
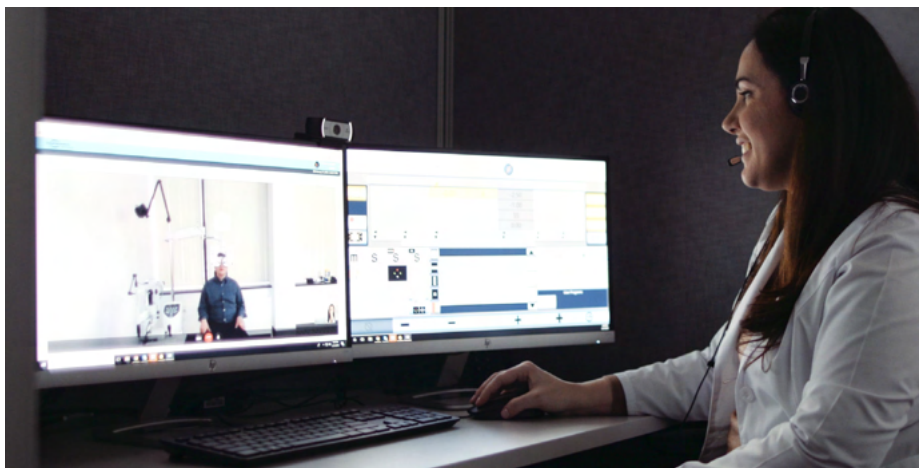


DigitalOptometrics offers users a digital platform to schedule fully remote, comprehensive eye exams.

in just 30 minutes, nationally licensed optometrists utilize remote-operated optical equipment to perform a full vision analysis test and autorefraction over video chat. If vision correction is needed, optometrists will give patients an updated prescription at the end of their appointment.

## 20/20NOW

20/20NOW's comprehensive eye exams are performed by a remote doctor using proprietary technology. Over 2.6 million exams have been conducted. Eye care practices have the flexibility to use their own doctor or a 20/20NOW-licensed optometrist to perform exams. The benefits are expanded exam coverage and lower costs. 20/20NOW's system is integrated with most OEMs, which allows practices to use most of their existing diagnostic equipment to launch "tele-optometry." 20/20NOW's technology includes AI and helps identify early signs of critical eye disease while improving patient experience. Based on surveys of over 15,000 patients last year, patient satisfaction is high at 98 percent, with 84 percent of patients referring the exam to a friend or relative.

## REMOTE PATIENT MONITORING

### Icare USA, Inc.

Icare USA, Inc. sells a range of tonometers for tracking intraocular
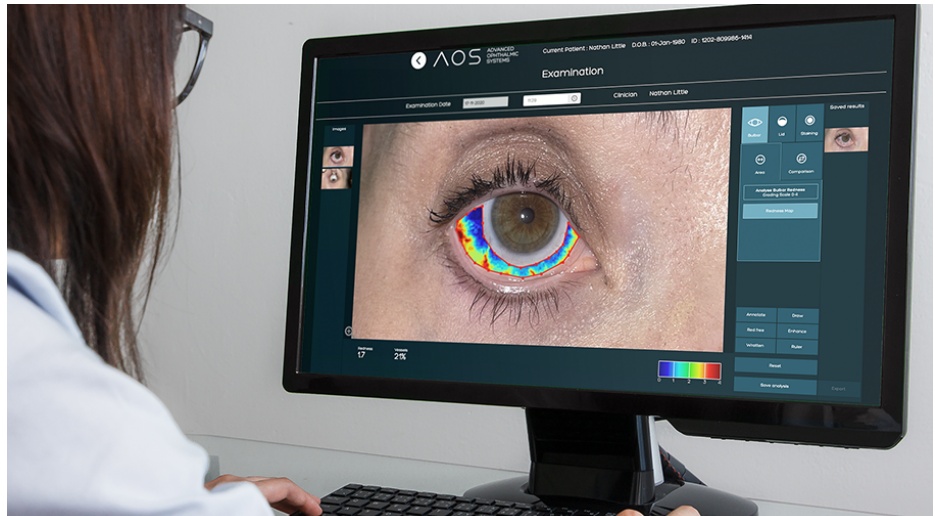


Advanced Ophthalmic Solutions offers a software platform that can be used in a clinic or remotely.

pressure. The iCare HOME tonometer is designed for patients to use according to their doctor's prescription. The HOME device has some upgraded features (i.e. audio cues), which allow training to be completed in the office or remotely. The results are then available online asynchronously for access by an ECP.

### Notal Vision

Notal Vision's ForeseeHOME AMD Monitoring Program includes a home-based device that supports the earlier detection of wet AMD. Offered by the Notal Vision Diagnostic Clinic, a credentialed healthcare provider, the ForeseeHOME program offers comprehensive patient training and monitoring between office visits. ForeseeHOME is FDA cleared and covered by Medicare.

## EQUIPMENT

### Marco

Marco offers a full suite of automated refractive and diagnostic devices as well as a broad range of premium classical exam lane equipment. Advancements include the 6100 series refraction software, enabling ECPs to maintain social distance, refract from anywhere, and address telehealth needs with no subscriptions required.

### NovaSight

NovaSight offers two flagship products: CureSight is an eye-tracking-based amblyopia treatment targeted toward children and intended to replace the eye patch. The treatment is carried out while the child watches any content of choice while the image undergoes real time processing

The iCare HOME tonometer lets patients monitor intraocular pressure at home.

according to the momentary gaze position. For telehealth, it treats children from the comfort of home under remote cloud supervision of the physician. CureSight provides feedback to caregivers and physicians via the cloud as well as remote real-time monitoring to measure compliance. The **EyeSwift** system is a comprehensive portable vision assessment device that screens for multiple vision impairments within seconds. The EyeSwift offers 11 different asynchronous vision exams and does not require an ECP to be present.

## Topcon Healthcare

**Topcon Healthcare's** new RDx telehealth software platform allows ECPs to conduct patient exams from anywhere. RDx connects to Topcon's data management software, Harmony, and also to the CV-5000S digital phoropter, which makes it possible to conduct exams and record exam data from anywhere in real time. The full suite of Topcon software can effectively reduce errors and cut down on time across the board, which allows doctors to see more patients each day.

## PATIENT/ECP COMMUNICATIONS

### EyeCarePro

Practices can use EyeCarePro's **GetSetCare** telemedicine platform for synchronous emergency consults, dry eye check-ins, vision therapy sessions, and ongoing appointments with chronic ocular diseases or conditions. HIPAA-compliant GetSetCare allows patients to set their telemedicine schedules and book through the practices' own websites.

### Solutionreach

**Solutionreach** offers SR Telehealth, a secure, high-resolution video tool for telemedicine that is launched directly from a text conversation. Visits using SR Telehealth can be pre-scheduled, and instructions can be sent in the text or email appointment reminder. Then, a link can be sent a few minutes before the visit through text to launch

the secure visit. Solutionreach lets ECPs deliver instructions and links to a third-party telehealth solution or through SR Telehealth.

## Telasight

**Telasight** offers ECPs real-time video consultations with fellow optometrists. Using the mobile app or the web-based platform, doctors can get advice, insight, or a second opinion on a patient currently in their office. The HIPAA-compliant service allows users to share scans, visual



The EyeSwift system is a comprehensive portable vision assessment device.

field images, or fundus images. Telasight users subscribe monthly.

## VisionWeb

**Uprise EHR and PM Software** assists ODs in their management of remote patient visits with customizable video and audio appointments, image and video storage and access, a HIPAA-compliant patient portal, automated telemedicine billing, and electronic patient education content.

REGULATIONS

# Remaking (Not Breaking) The Rules

**By Ryan Ames, OD**

"CMS and most commercial payers relaxed restrictions on who could receive telemedicine services, who could provide them, where they could be provided, and how they could be delivered."

**Ryan Ames, OD**

The current public health emergency caused every industry in the world to re-think how they do business. The old ways were not going to work anymore. Health care had to transform nearly overnight in order to continue caring for patients. Telemedicine was one way to achieve this.

Thankfully, the Centers for Medicare and Medicaid Services (CMS) and most commercial payers saw this urgent need and relaxed restrictions on who could receive telemedicine services, who could provide them, where they could be provided, and how they could be

delivered. CMS has extended these more relaxed rules through the end of the public health emergency, which does not currently have an anticipated end date. However, with the recent drop in COVID-19 cases, increased vaccinations, and overall movement toward herd immunity, it would be reasonable to assume the public health emergency will be considered over sooner rather than later. With this, we would expect many of the "pre-COVID rules" around telemedicine to return.

## Before and After COVID

The loosening of restrictions on telemedicine services in many ways feels like an extension of the "Patients Over Paperwork" initiative established by the CMS. This was an effort started in 2017 to eliminate overly burdensome and unnecessary regulations to allow health care providers to once again focus on caring for their patients. Prior to the public health emergency, CMS restricted telemedicine services to providers who were part of a

Federally Qualified Health Clinic or Rural Health Center. These two places provide services to patients in remote areas where care to providers is quite limited. For the vast majority of us, this had excluded us from providing telemedicine care to Medicare patients.

In response to the pandemic, CMS extended Medicare payment for many services delivered via telemedicine at least until the end of 2021. CMS indicated that it does not have authority to adopt American Medical Association recommendations to continue to allow telemedicine to be provided outside of rural areas or for patients to continue receiving telemedicine services in their homes beyond the declared public health emergency. We will have to wait to see if the location requirements are put back into place.

## Additional Codes

As part of this relaxation of the rules, CMS added numerous CPT codes

to the list of services providers could bill for when performed via telemedicine. E&M codes 99201-99215 are part of the permanent list of billable telemedicine codes, but the ophthalmological service codes (92002, 92004, 92012, 92014) have been temporarily added as well.

Keep in mind, the definitions and requirements of these codes do not change from what is required during in-person care. You cannot bill 92014 if you simply do a Zoom call with a patient for their swollen lid. You must achieve each required element of a comprehensive ophthalmological service if you are to bill that code. This would certainly require the patient to be seen in an actual clinical setting with specialized equipment, but the provider could be located remotely. However, many other billable codes can be achieved via everyday type video communications.

When billing telemedicine claims for services delivered on or after March 1, 2020, and for the duration of the COVID-19 emergency declaration:

• Include Place of Service (POS) equal to what it would have been had the service been furnished in person.

• Append modifier -95 to indicate the service took place via telehealth.

After the public health emergency, we can anticipate the POS will need to be changed to -02 to indicate telehealth.

## HIPAA Compliance

Protecting patient's privacy is a major concern when providing telemedicine. For this reason, only HIPAA-compliant applications were allowed prior to the public health emergency. Probably the most surprising policy change was the allowance of everyday communication platforms. These are "non-public facing" remote communication products that, as a default, allow only the intended parties to participate in the communication.

Non-public facing remote communication products would include, for example, platforms such as Apple FaceTime, Facebook Messenger video chat, Google Hangouts video, WhatsApp video chat, Zoom, or Skype. Typically, these platforms employ end-to-end encryption, which allows only an individual and the person with whom the individual is communicating to see what is transmitted.

This is different from public-facing products such as TikTok, Facebook Live, Twitch, or a public chat room. These platforms are not an acceptable form of remote communication for telemedicine because they are designed to be open to the public or allow wide or indiscriminate access to the communication.

Although everyday communication platforms have been temporarily allowed, the overriding guidance is that reasonable precautions must be taken to protect patient privacy. For example, a doctor cannot provide a telemedicine service to a patient while standing in the middle of a grocery store where personal health information could be overheard. The provider must also instruct the patient to take reasonable precautions as well. If the provider is aware that the patient is not in a private setting, they need to instruct the patient to take reasonable precautions.

The U.S. Department of Health and Human Services Office for Civil Rights (OCR) stated, "Covered health care providers will not be subject to penalties for violations of the HIPAA Privacy, Security, and Breach Notification Rules that occur in the good faith provision of telehealth during the COVID-19 nationwide public health emergency. This Notification does not affect the application of the HIPAA Rules to other areas of health care outside of telehealth during the emergency." OCR will also exercise its enforcement discretion and will

not pursue otherwise applicable penalties for breaches that result from the good faith provision of telemedicine services during the public health emergency.

## Patient Consent and Initiation

The following rules have not changed during the public health emergency. *Patients must give consent to receive telemedicine services from a provider.* Depending on state laws, this may be verbal consent or through a signed document. In both cases, documentation of the consent is required.

A billable telemedicine service must also be initiated by the patient. The provider can offer telemedicine services and/or educate patients about the option, but the care must ultimately be initiated by the patient. This can be a difficult concept to understand. The purpose of this rule is to prevent a provider from calling a patient without their consent and then billing for the service as a telemedicine visit. For example, a doctor could not start a patient on a new eye drop and call the patient out of the blue a week later to check in and then charge the patient or the third-party payer for a telemedicine visit. However, a doctor could tell the patient that they would like to see them in a week to evaluate how the new drop

is working. The provider could inform the patient that they could either provide this service in-office or via telemedicine. If the patient chooses to use the telemedicine option, the follow-up visit would be considered to have been initiated by the patient and could be billed to the appropriate payer.

## Clarification of Existing Policy

Services that are provided via technology where the provider is in the same location as the beneficiary (example: when trying to minimize risk of exposure), even though technology was used, it should be billed as though it were furnished in-person, and telemedicine limitations would not apply.

Although most payers follow the guidance and rules put forth by CMS, individual commercial payers, and even state Medicaid programs, can have their own rules. To be certain what each payer requires and/or allows, you will need to contact them directly. The Center for Connected Health Policy has a helpful guide with a state-by-state listing of Medicaid policies. This can be found at the Center for Connected Health Policy: The National Telehealth Policy Resource Center.

When we needed to act quickly to continue to provide care to

patients, many rules were loosened. As the emergent needs fade and uncertainties become knowns, we will inevitably see some rules return and the reigns tightened on the delivery of telemedicine. One thing is very clear, the landscape will forever be changed.

*Ryan Ames, OD, is the owner of InSight Eye Care in Wisconsin. Along with practicing full-time, he is currently the president elect of the Wisconsin Optometric Association. Dr. Ames has been the third-party consultant for several state associations and now lectures and writes on the topics of medical record documentation and coding. He has also served as a senior advisor for RevolutionEHR.*

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4. **Telehealth: Delivering Care Safely During COVID-19**

REIMBURSEMENT

# New Telemedicine Codes Chart the Future for Optometry

**By John Rumpakis, OD, MBA**

"*CMS relaxed the rules that surround how and where a provider can provide telemedicine services.*"

From a business perspective, 2020 provided a wealth of situational items from which we can learn to improve our businesses. The first monumental change in 2020 was dealing with the shelter-in-place mandate that closed practice doors from coast to coast. While many were advocating that eye care was an essential service, most if not all ophthalmic-based practices were relegated to providing emergent care only in person, and the rest of our patient interaction was virtual, through our newly discovered skill of providing telemedicine services for our patients. The second was the change in E&M coding that arrived in January 2021.

Telemedicine refers to a distinct level of services that have traditionally been performed via a face-to-face interaction between the patient and the physician. Telemedicine allows the interaction to still occur face-to-face; however, it can be achieved via audio and video connections.

Prior to the COVID-19 Public Health Emergency, both the popularity and utilization of telemedicine was minimal. Why? A few things stand out such as restrictive covenants on its use and low reimbursements. Maybe most significant to an ophthalmic-based practice is that we are a hands-on, close-quarters profession. It is difficult to see a staining pattern or examine the retina via telemedicine. Not saying that it can't be done, but it is difficult to say the least.

## Relaxing the Rules

In response to the public health emergency, in March 2020, CMS relaxed the rules that surround how and where a provider can provide telemedicine services:

- Medicare can pay for office, hospital, and other visits furnished via telemedicine across the country and *including the patient's places of residence*. In essence this allows telemedicine services to be provided without the geographic or location-based restrictions previously required.
- The Office of Inspector General is providing flexibility for health care providers to reduce or waive cost-sharing for telemedicine visits paid by federal health care programs.
  - Patients must be notified that a claim will be submitted to the payer.
- The requirement to store communication and ensure HIPAA compliance for all patient communications is not being enforced during this emergency, and this new action allows for telemedicine services to be provided using "everyday communications technologies" such as FaceTime or Skype.
- Services can now be provided to both new and established patients.

**John Rumpakis
OD, MBA**

- Telephone services are now reimbursed.

- Place of Service rules were modified to all POS 11 (office) to be used for telehealth services rather than the POS 2 (telehealth) indicator.

- CMS added the Eye visit codes to the list of covered exams during the COVID-19 public health emergency. *Documentation requirements, however, remain the same:*
  - 92002, 92012, 92004, and 92014 are all achievable via virtual face-to-face interaction depending on the technology you have in place.
  - Place of Service is 11 and append modifier -95.
  - This expansion of coverage may be unique to CMS.

While this relaxation of the rules helped practices immensely, we are most likely going to see some changes going forward. For example, the prior requirement that a patient live in a physician shortage area and must travel to a properly qualified facility to initiate the telemedicine service will most likely never go back into place. I believe that the patient will be able to live anywhere and will be able to initiate the telemedicine service from anywhere, including their home. However, I don't see the use of common platforms such as Skype or FaceTime continuing and returning to the specific use of a HIPAA-protected portal audio/video application.
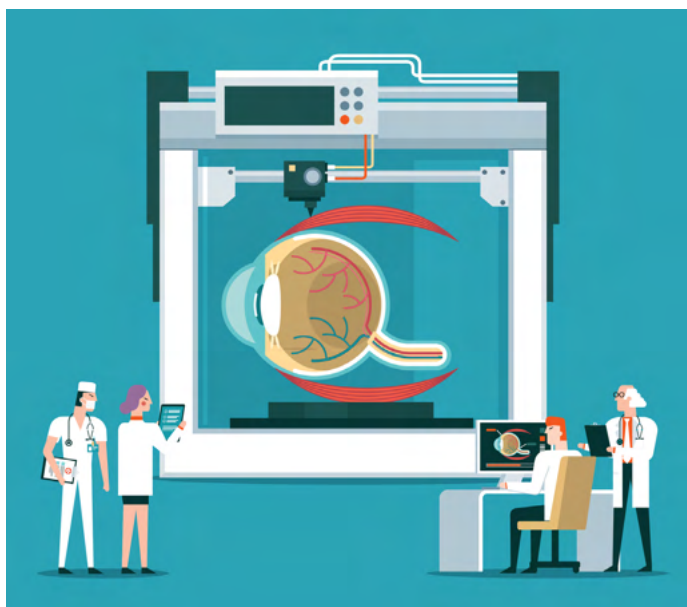
Additionally, the ability to waive co-pays and deductibles most likely won't continue as carriers will resume passing that cost on to the consumer of care.

## New E&M Definitions, New Opportunities

The new year has brought us new definitions and new rules when using the E&M codes in our practices. It will be easier and less complicated to use as well as more in alignment with providing remote-based services since we don't have to score the individual examination requirements.

The new E&M definitions and coding rules surrounding providing office visits will be a huge boon to practices that want to become more efficient, more technology savvy, and diversify the type of services they provide to their patients. Here is a breakdown of those changes:

1. The level of history performed and the level of physical exam performed no longer have any bearing on determining the level of the office visit. Every E&M code definition now simply states that the physician should perform a "medically appropriate history and examination."

2. Code 99201 has been eliminated from the code set. Since the only difference between 99201 and 99202 was the level of history performed, it was no longer needed. Therefore, the lowest level of E&M visit we can perform on a New Patient is a 99202.

3. Time has been redefined for E&M coding going forward. Total or cumulative time spent is composed of:
   a. preparing to see the patient
   b. obtaining and/or reviewing separately obtained history
   c. counseling and educating the patient/family/caregiver
   d. ordering tests, medications, or procedures
   e. referring and communication with other health care professionals

4. The physician can choose on an encounter-by-encounter basis if they want to use "time" or medical decision making to score and code the encounter.

5.  Removed ambiguous terms from medical decision making scoring and created a level encounter between new and established patients.

6.  Created a new but shorter prolonged services code 99417 (15 minute) increments to be used if you exceed the time limits on 99205/99215.

The new wording of the E&M codes that require that the physician perform only a "medically appropriate history and exam" is a boon to efficiency, better patient care, and the ability to provide these remotely without sacrificing reimbursement.

Determining your code based upon total time as defined above, or by medical decision making, is now a choice you have for each individual patient encounter. This provides you with greater flexibility in what to code and when. Why the big fuss? Because all E&M codes are eligible, and have always been eligible, as a telemedicine service with reimbursement rates equal to that of those being provided in the office. And with the increase in telephone service reimbursements (CMS only), being able to get paid for our time/expertise when speaking to a patient on the phone can be a significant benefit to a practice.

Many thought 2020 would be the year of vision. I still think it was, but not the vision we originally had in mind. It was the year of business and innovation and implementation of your business vision. How well you fared, was most likely based upon how well you were prepared and how well you used your time to execute your vision. These expanded telemedicine opportunities are among the improved ways to achieve that vision.

*John Rumpakis, OD, MBA, is Founder and Chief "Make It Happen" Officer of Practice Resource Management, Inc.*

## Summary of Telemedicine Codes Currently Covered

| CPT Code | Time | Modifier Used | POS |
|---|---|---|---|
| **Evaluation & Management Visits** | | | |
| 99201 | 10 MIN | 95 | 11 |
| 99202 | 20 MIN | 95 | 11 |
| 99203 | 30 MIN | 95 | 11 |
| 99204 | 45 MIN | 95 | 11 |
| 99205 | 60 MIN | 95 | 11 |
| 99211 | 05 MIN | 95 | 11 |
| 99212 | 10 MIN | 95 | 11 |
| 99213 | 15 MIN | 95 | 11 |
| 99214 | 25 MIN | 95 | 11 |
| 99215 | 40 MIN | 95 | 11 |
| **Ophthalmic Codes** | | | |
| 92002 | NA | 95 | 11 |
| 92012 | NA | 95 | 11 |
| 92004 | NA | 95 | 11 |
| 92014 | NA | 95 | 11 |
| **Evaluation Of Static Or Video Images** | | | |
| G2010 | NA | NA | 11 |
| **Online Digital Evaluations** | | | |
| 99421 | 5-10 MIN | NA | 11 |
| 99422 | 11-20 MIN | NA | 11 |
| 99423 | 21 MIN + | NA | 11 |
| **Physician & Patient Phone Calls** | | | |
| G2012 | 5-10 MIN | NA | 11 |
| 99441 | 5-10 MIN | NA | 11 |
| 99442 | 11-20 MIN | NA | 11 |
| 99443 | 21 MIN + | NA | 11 |
| **Inter Professional Consultations** | | | |
| 99446 | 5-10 MIN | NA | 11 OR 22 |
| 99447 | 11-20 MIN | NA | 11 OR 22 |
| 99448 | 21-30 MIN | NA | 11 OR 22 |
| 99449 | 31 MIN + | NA | 11 OR 22 |
| 99451 | 5 MIN + | NA | 11 OR 22 |
| 99452 | 30 MIN | NA | 11 OR 22 |

ASSOCIATIONS

# Optometric Associations Evolve On The Acceptance of Telemedicine

**By Mike Rothschild, OD, Professional Editor**

"Several organizations that drive our profession and its future have amended their positions on telemedicine."

Optometry is a profession built on a passion to take care of people. Our relationships with patients have propelled our profession forward since its beginning. We have a long history of respectful debate, all driven by our deep-rooted desire of delivering quality care.

Every expansion of our scope of care and our delivery methods has created opportunities for discussion about the best approach for change. For example, many well-intentioned optometric leaders once maintained that we should remain a "drugless" profession.

Today, among the many topics we are debating is the proper use of telemedicine within optometry.

While the technological advances can allow those motivated exclusively by profit to bypass needed care, it can also allow us to deliver improved and enhanced levels of services to our patients. The balance of advancing our profession while protecting our patients is a delicate walk. Those who serve in the capacity to develop guidelines and policies are charged with finding that balance.

Telemedicine in optometry was a hot topic prior to the pandemic. The national health emergency then forced its hand, and many of us were able to gain experience without much training or forethought.

Several organizations that drive our profession and its future have amended their positions on telemedicine

following these developments. While it is safe to say that these organizations aren't finished fine-tuning these positions, it is clear that telemedicine is a significant part of our future. It will create unlimited opportunity allowing us to expand how we care for our patients. It will also create more responsibility for us to protect our patients.

## The American Optometric Association Changes Its Stance

As detailed by the American Optometric Association (AOA) in its just updated **telemedicine policy guide,** optometry is leading the way in health care by embracing the safe and effective use of new technologies to expand access, improve outcomes, and further strengthen the doctor-patient relationship. Following a year-long dialogue that included doctors from across the country, policy experts, and industry leaders, the AOA issued a blueprint to guide quality-driven changes in telemedicine that will serve America's growing eye health and vision care needs, through the current nationwide public health crisis and into the post-pandemic recovery. The AOA's Telemedicine in Optometry policy guide covers use of artificial and augmented intelligence, innovative telemedicine platforms, and a range of legal and privacy considerations reflecting optometry's essential and expanding role in health care and the recognition of an in-person, comprehensive eye exam as a "gold standard" of care.

## Here Are Key Excerpts From The AOA's Telemedicine In Optometry Policy Guide:

- **Where the AOA stands on telemedicine:** "The AOA supports the appropriate use of telemedicine in optometry to access high-value, high-quality eye, health, and vision care. Telemedicine in optometry can serve to expand patient access to care, improve coordination of care, and enhance communication among all health care practitioners involved in the care of a patient. The AOA supports coverage of and fair and equitable reimbursement for telemedicine in optometry."

- **Uncompromising standard of care:** "The standard of care for eye, health, and vision services must remain the same regardless of whether services are provided in-person, remotely via telehealth, or through any combination thereof. Doctors may not waive this obligation or require patients to waive their right to receive the standard of care."

- **Appropriate uses:** "The use of remote patient monitoring may be appropriate for data acquisition, patient communication, confirmation of expected therapeutic results, confirmation of stability or homeostasis, and assessing changes in previously diagnosed chronic conditions."

- **Doctor-patient relationship and direct-to-patient technology:** "Use of direct-to-patient eye and vision health applications (including online vision tests and other mobile eye and vision-related applications) does not constitute telemedicine in optometry unless used under the direction of a doctor of optometry."

- **Established doctor-patient relationship:** "Fundamental elements of the doctor-patient relationship must be established and maintained. Physicians must act as advocates on behalf of the patient and are obligated to discuss necessary and appropriate treatment alternatives."

## NAVCP Provides Guidelines on Ocular Telemedicine Covered by Vision Plans

The National Association of Vision Care Plans (NAVCP) Board of Directors approved the **Ocular Telemedicine – Vision Plan Covered Services and Provider Guidelines** policy statement during its June 29, 2020, virtual meeting. The policy statement was compiled with extensive member input and consultation with both the NAVCP Provider Council and Retail Council along with outside industry stakeholders and telemedicine community leaders.

The intent of the policy statement is to define the ocular telemedicine common denominator that can be covered by managed vision care plans. It is to serve as a guide for working with managed vision care plans who offer ocular telemedicine as a covered service. The policy statement will simplify provider, client, and industry—including equipment and technology system manufacturers—planning and participation in service delivery.

The NAVCP policy statement isn't meant to describe the only forms of legal and beneficial ocular telemedicine available to patients and providers. Instead, it was created to indicate forms of telemedicine that are appropriate for the standard vision benefits offered by NAVCP member plans. The policy statement does not require an NAVCP member to offer this benefit, and members are able to provide alternative approaches to ocular telemedicine.

NAVCP will review this policy statement annually and update it as technology advances and the standard of care evolves.

## ASCO Supports Teaching Telemedicine to Future Doctors of Optometry

The Association of Schools and Colleges of Optometry (ASCO) is the national academic leadership organization committed to advancing optometric education and research to enhance the health and well-being of the public. Since 1941, ASCO has pursued this mission by representing the interests of institutions of optometric education and by enhancing the efforts of these institutions as they prepare highly qualified graduates for entrance into the profession of optometry in order to best serve the public's eye and vision needs. ASCO proudly represents all accredited schools and colleges of optometry in the United States.

Because the organization focuses its efforts on optometric education, ASCO has not taken a formal position on the use of telemedicine in the practice of optometry. Members do, however, recognize the importance of teaching future Doctors of Optometry about the wide array of telemedicine technologies they might encounter once they are practicing in the field. Therefore, ASCO-member schools invest significant resources to provide those educational opportunities for students.

The recent challenges to both optometric practice and the delivery of optometric education as a result of the COVID-19 pandemic have shone an even brighter spotlight on the need for this education. Each school/college of optometry operates a clinic for the local community that provides important clinical care to patients while helping students gain first-hand experience. When social distancing and other safety measures were necessary to safeguard the health and well-being of those patients, students, and staff members last March, the clinicians at these clinics—and their students—quickly modified operations to provide important eye and vision care remotely through the use of technologies and procedures referred to as "telemedicine." Many lessons were learned in the process, especially with regard to how and when telemedicine modalities are most useful in the continuing provision of care.



*photo courtesy of NovaSight*

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TERMINOLOGY
# Telemedicine Glossary

**asynchronous:** term describing "store and forward" transmission of medical images and/or data because the data transfer takes place over a period of time and typically in separate time frames. The transmission typically does not take place simultaneously.

**authentication:** method of verifying the identity of a person sending or receiving information using passwords, keys, and other automated identifiers.

**bandwidth:** measure of the information-carrying capacity of a communications channel; a practical limit to the size, cost, and capability of a telehealth service.

**Bluetooth wireless:** industrial specification for wireless personal area networks (PANs) that provides the means to connect and exchange information between devices such as mobile phones, laptops, PCs, printers, digital cameras, and video game consoles over a secure, globally unlicensed short-range radio frequency.

**data compression:** a reduction in the number of bits needed to represent data to save storage capacity, speed up file transfer, and decrease costs for storage hardware and network bandwidth.

**digital camera (still images):** camera that stores images digitally rather than recording them on film, allowing data to be downloaded to a computer system.

**Digital Imaging and Communication in Medicine (DICOM):** A method to reduce the volume of data using encoding that results in the data having fewer bits of information than the original dataset to reduce image processing, transmission times, bandwidth requirements, and storage requirements.

**digital signature:** hardware or device not part of the central computer that can provide medical data input to or accept output from the computer.

**distance learning:** incorporation of video and audio technologies, allowing students to "attend" classes and training sessions that are being presented at a remote location.

**distant provider:** telehealth service where provider giving care is not physically on site but is communicating directly with the patient and seeing live data. Provider may be a specialist remoting or the primary caregiver.

**distant site:** site at which the physician or other licensed practitioner delivering the service is located at the time the service is provided via telecommunications system.

**Electronic Data Interchange (EDI):** allows one company to send information to another company electronically rather than with paper.

**encryption:** mathematical system for authenticating digital messages or documents; valid signatures give the recipient evidence that the message was created by a known sender and not altered in transit.

**kiosk:** self-service device that can function as patient check-in stations at clinics or doctors' offices; more advanced kiosks can perform basic diagnostic tests on patients.

**local area network (LAN):** network set up to serve as few as two or three users in a home office or several hundred users in a corporation's central office.

**mobile telehealth:** delivery and facilitation of health and health-related services including medical care, provider and patient education, health information services, and self-care via telecommunications and digital communication technologies.

**noise canceling:** method for reducing unwanted sound during videoconferencing or other electronic audio transmission.

**originating site:** location of the patient in a telehealth visit.

**patient exam camera (video):** devices that do not record video but serve as a conduit for video signals.

**peripheral devices:** internal or external device that connects directly to a computer but does not contribute to the computer's primary function.

**personal area network (PAN):** a computer network that enables communication between computer devices near a person.

**personal health record (PHR):** electronic, universally available, lifelong resource of health information needed by individuals to make health decisions.

**router:** connects multiple networks and forward packets destined either for its own networks or other networks.

**Rural Health Care Division (RHCD):** primarily engaged in furnishing outpatient services with one or more physicians and one or more physician assistants or nurse practitioners engaged in providing primary medical care.

**teleconferencing:** companies can conduct meetings, customer briefs, training, demonstrations, and workshops by phone or online instead of in person.

**teleconsultation:** health care consultation carried out remotely using audiovisual telecommunications between doctor and patient.

**telemedicine:** technology-enabled health and care management and delivery systems that extend capacity and access.

**virtual, at-home visit (VAHoV):** health care visit delivered to a patient who is at home or other private location by a health care professional via an audiovisual connection in real time.

**wide area network (WAN):** computers connected to a wide-area network are often connected through public networks such as the telephone systems or satellites.

**WiFi:** technology that allows computers, smartphones, or other devices to connect to the internet or communicate with one another wirelessly within a particular area.

COMPANY PROFILE

# 20/20NOW Provides Eye Care Practices the Ability to Grow In-Office Eye Exams While Lowering Costs

**20/20NOW®**
The Future of Eye Exams is Here

No one understands the importance of a thorough and accurate eye exam more than you – and 20/20NOW. Our goal is to uphold the standard of a comprehensive exam while maintaining efficiency and affordability. Unlike other remote exams, our exams meet or exceed the guidelines set by major vision plans.

We enable you to reach more patients by providing on-demand, comprehensive exams that are performed by a remote licensed OD…at a cost less than hiring an associate doctor.

A 20/20NOW doctor is available whenever the practice chooses to be open, including evenings and weekends. **With 20/20NOW the Doctor is Always In!**

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BUSINESS REVIEW AND CONSULTATION

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## BUSINESS BENEFITS:

- Increased Exams and Optical Revenues
- Add Tele-Optometry lane to see more patients
- Expand exam hours, including evenings & weekends
- Lower Costs
- Safer Exams
- Open satellite office cost efficiently

## PRACTICE FLEXIBILITY:

- Delegate routine eye care so you can focus on Medical
- Back-up coverage whenever in-person doctor is out
- Practice doctors now have the freedom to work from home.

## SUPERIOR TECHNOLOGY:

- Patented exam process
- Uses AI to help diagnose critical eye disease in its early stages

## 20/20NOW'S SOLUTION ELIMINATES RISK AND BARRIERS TO GETTING STARTED

- Pay only for what you use
- Lower up-front costs to get started
- Integrated with most digital OEMs so you don't have to invest in new equipment
- 0% interest financing available
- The most experienced Tele-Optometry Provider
- Over 2.6M exams conducted
- Flexible business model to meet legal requirements in most states

## SUPERIOR PATIENT SATISFACTION:

- Patients view exam as high tech, thorough and comprehensive

**To Learn More:** Visit **www.for2020NOW.com/ROB** or **contact Greg Lechner** at 513-313-6143 or **glechner@for2020now.com**

**REMOTE** | **Capture Refract Diagnose**

# INCREASE EYE EXAMS AND
# LOWER COSTS WITH THE TELE-OPTOMETRY LEADER

## Superior Experience

- Over 2.6M exams performed with 25 industry-leading patents
- Patients interact live, with your doctors or ours, through HD video conferencing
- Work from Home - ODs have greater flexibility for work/life balance

## Superior Technology and Exam Process

- 20/20NOW's In-Office Exams meet the standard of care
- Utilizes AI to assist in diagnosing critical eye disease
- Highly Accurate RX - Increase Optical Sales

## Lower Cost to Get Started

- Integrates with 14 different Digital EOMs to reduce your equipment investment
- 0% Financing Available
- Flexible Business model to meet your states' legal requirements and practice needs

20/20NOW®
THE FUTURE OF EYE EXAMS IS HERE

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## SIGN UP FOR A FREE BUSINESS
## REVIEW & CONSULTATION

**PATIENTS LOVE IT!** **98%** SATISFACTION

**PATIENTS** **84%** REFER TO FRIENDS & FAMILY

**THE DOCTOR IS ALWAYS IN!**

COMPANY PROFILE

# ABB Optical/EyecareLive Expand Telemedicine Offerings to Include E-Commerce Services
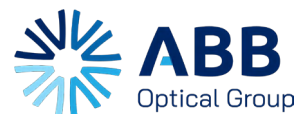
**ABB Optical Group (ABB)** is a leading provider of optical products, services, and business solutions in eye care. ABB operates three business pillars: ABB Contact Lens, ABB Labs, and ABB Business Solutions. The company is focused on the future of eye care professionals (ECPs), helping them succeed by making practices more efficient and assisting providers to navigate market changes.

In May 2020, ABB entered into a long-term relationship with **EyecareLive**, a leader in telemedicine technology, to provide more options for ECPs to connect with their patients during the COVID-19 pandemic and beyond. ABB Business Solutions brought EyecareLive's doctor-owned, HIPAA-compliant, optically focused platform to ECPs as part of a special promotion as eye care practices across the country began to reopen their doors. Since then, ECPs across the country have implemented the EyecareLive platform, through ABB, as a way to manage patient flow, conduct virtual patient visits, and maintain the critical doctor/patient relationship. EyecareLive's patient-friendly app allows for easy appointment scheduling, video conferencing, messaging, and a variety of patient notifications. The platform also provides patients the ability to take app-facilitated tests for visual acuity, dry eye, contact lens comfort, and macular degeneration.

In August 2020, ABB and EyecareLive announced integrated ordering and fulfillment of optical products through ABB. The ABB e-commerce enhancement within the EyecareLive platform allows patients to conveniently purchase their prescribed contact lenses directly from their doctor. The payment can be processed through the application, and insurance benefits can be applied. The

order is then fulfilled by ABB, on behalf of the ECP, and shipped directly to the patient. ECPs are able to offer a convenient service and increase capture rate. EyecareLive introduced other additions and enhancements to its platform, including the ability for ECPs to e-prescribe medications and send the prescriptions directly to the patient's preferred pharmacy, the capability for ECPs to schedule virtual appointments on behalf of patients, and a reimagined, easier-to-use doctor's portal with intuitive improvements and built-in tools.

Together, ABB and EyecareLive continue to utilize telemedicine to help ECPs improve office efficiency, reduce costs, and increase revenue.

**To contact ABB**, please email: **abbsolutions@abboptical.com**

New patient expectations.
New practice revenue.

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LIVE.

**Helping you connect with patients, the way they want you to.**

Increasing your patients' access to care has never been so important. It's not just what they want, it's what they expect. Designed exclusively for eye care, EyecareLive brings a proven telemedicine solution to meet this need while best managing gaps in the schedule, improving practice efficiency and generating revenue.

**Get Started Today - 60 Days at No Cost**

📞 Call us at **855.589.7913**
✉️ Email us at **abbsolutions@abboptical.com**

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## COMPANY PROFILE
# Tele-Optometry: Successes And Challenges In Reflection



It's been three years since the **DigitalOptometrics'** remote comprehensive eye health and vision analysis technology was launched commercially after considerable development and testing. Our mission was to create a system, with the help of experienced optical software engineers, to address critical needs of the optical industry and optometric patients. We focused on the shortage of practicing optometrists while seeking a cost-effective means of conducting comprehensive eye exams for providers and patients with a patient-centric remote eye exam system. We sought a system that delivered convenience to patients for eye exams at locations, on days and times of their choice, availability of exams to the underserved and technology utilized by optometrists from optometric or home office locations while enabling optometrists to improve the quality of their personal lives with family and friends while being engaged in their profession whether actively engaged in the practice full or part-time, home-bound, or retired.

DigitalOptometrics is now being utilized in more than 25 States in the U.S. and Canada and continues to expand its footprint monthly. Hundreds of thousands of remote exams have been performed with our system. It has received the highest performance ratings from optical executives and managers and high Net Promoter Scores from surveyed optometric patients. Both patients and providers enjoy the efficiency of our exams with an exam completion rate of 20 to 30 minutes. Our system is utilized either in one optical lane or in the first and second optical lane in single locations to increase location volume cost effectively by decreasing direct and indirect costs per exam. A soon-to-be-released independent study will give our system high marks when comparing our remotely performed eye exams with an exam performed on-site. Our system has been installed in a college of optometry as part of its curriculum. ECPs can expand
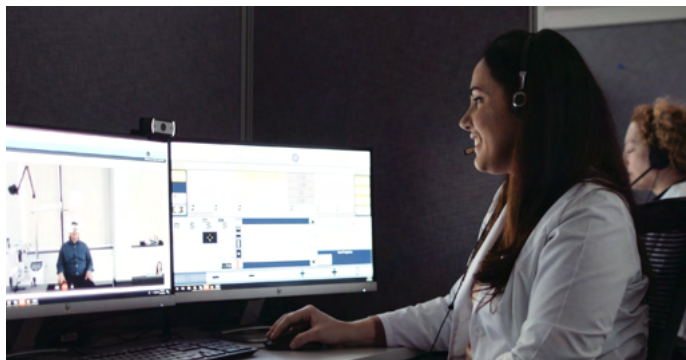
without being restricted by the availability of optometrists. We did not anticipate that our system also delivers a "no-contact" exam.

Communication is an important part of our daily effort to inform the optometric community, state optical associations, and state regulators of the details of our remote system and how it is distinguished from "refraction-only" or "direct-to-consumer" systems. We do this by explaining in detail each of the steps taken in the performance of our remote exam, which includes an eye health analysis and subjective refractions by a licensed optometrist. In fact, remotely located optometrists perform a replication of a comprehensive eye exam conducted by an on-site, in-person licensed optometrist but performed by the optometrist at a location distanced from the patient utilizing visual and voice communication with the patient in real-time and remotely operating ophthalmic equipment. We continue in our efforts to advance the adoption of the licensing of optometrists nationally rather than on a state-by-state basis. This will permit better utilization of the professional services of licensed optometrists.

For more information, **contact Mike Danhoff** at 877-506-0002 (Option 2) or at **info@digitaloptometrics.com**
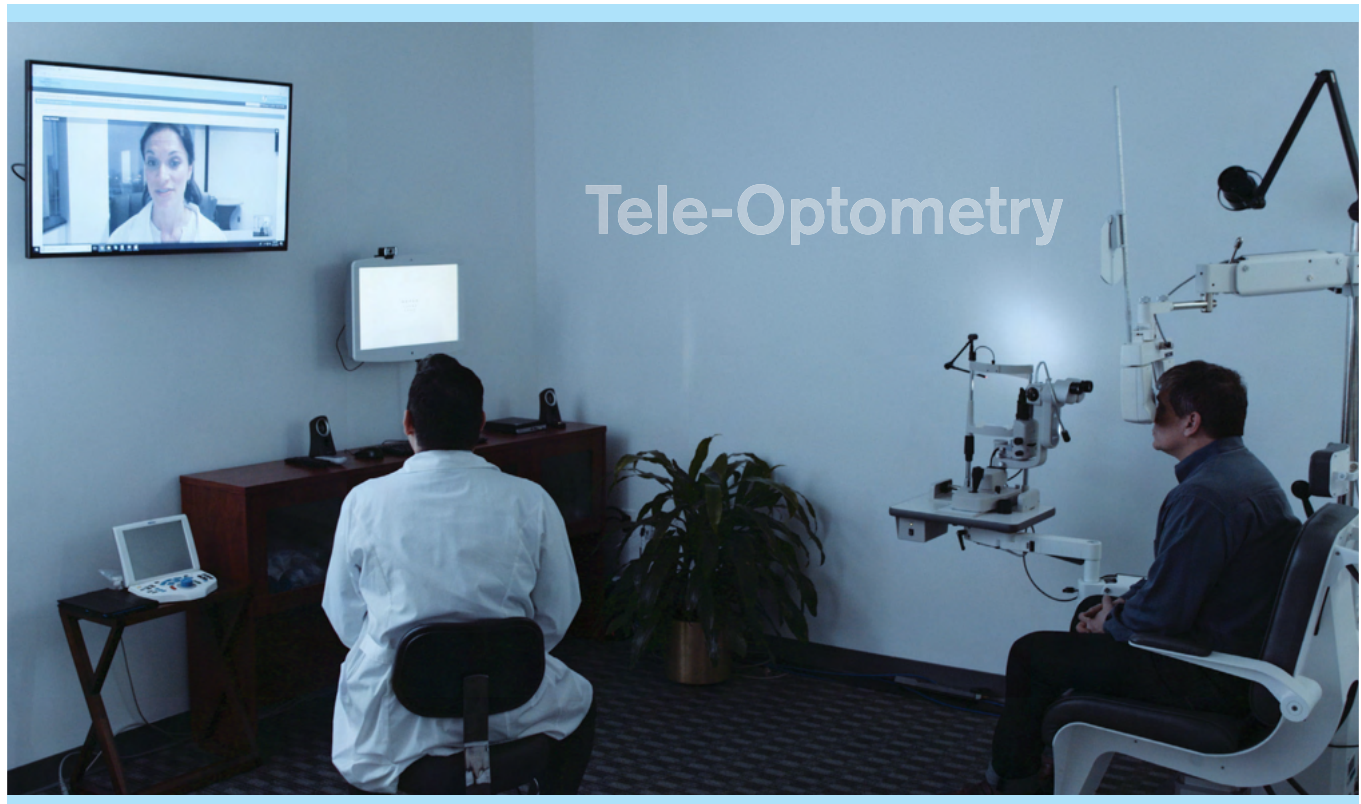
Tele-Optometry

# Hundreds of thousands of remote eye exams performed in more than 25 states in the U.S. and in Canada

- DigitalOptometrics patented tele-optometry provides optometric excellence in the performance of remote comprehensive eye health and vision analysis exams by an Optometrist

- Our remote exam system delivers flexible utilization either with a customer employed Optometrist, a DigitalOptometrics remotely located Optometrist, or a combination of both during any day, week or month

- Social distancing between patient and Optometrist are an integral part of our remote eye exam

- Replicates traditionally performed on-site exam by providing both visual and oral communication between patient and Optometrist during the eye exam

- Reduces total exam time to 30 minutes or less

- Patient surveys reflect patient approval with high Net Promoter Scores after a DigitalOptometrics remote exam experience

- Economies, Efficiencies and Effectiveness for growth has been proven by customer use of the DigitalOptometrics tele-optometry system

- Demonstrations of our remote eye exam system available in our New York corporate and Cincinnati regional offices

*Celebrating our 3rd Anniversary*

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Eyecare Technology Embraced

*Learn more and join others who are realizing the benefits!*
Watch our video at: **www.digitaloptometrics.com**
info@digitaloptometrics.com    **877.506.0002**

COMPANY PROFILE

# Topcon's New RDx Platform Provides Even More Advanced Telemedicine Features

**Topcon's** new RDx ocular telehealth software platform is an innovative eye health exam solution that allows practitioners to connect to their office or offices from home or other remote locations and conduct comprehensive eye exams in real-time, without sacrificing quality of care. RDx connects to Topcon's CV-5000S digital phoropter, allowing practitioners to perform fully remote refractions.

In addition to the integrated face-to-face consultation dashboard, RDx automatically imports the autorefractor and lensometer data and presets the refraction starting point on the digital phoropter to streamline the exam. Eye care professionals can have meaningful interactions with staff and patients through integrated remote video conferencing while connecting and controlling devices within the practice...all in real-time.

RDx allows physicians to be present at more than one location and offer more extended or more flexible office hours. It also reduces the time per examination, thereby enabling practitioners to see more patients. Patients also benefit from the RDx technology because it allows them to have their eye exam done at a time and place convenient for them while maintaining a safe social distance and reducing or eliminating time in the waiting room.

## Integration with Harmony Data Management

RDx also integrates with Topcon's clinical data-management solution, Harmony. Harmony connects hundreds of ophthalmic devices, regardless of device manufacturer, in multiple locations to enable analysis of all relevant data on a single screen. Interactive displays, multi-visit views and historical analysis work together to increase diagnostic confidence and enhance patient care.



Harmony connects seamlessly with EMR software to minimize errors and save time by sending patient information directly to and from connected instruments. By incorporating all of a patient's imaging and test data into a single software platform, dedicated review software for each instrument in the practice is no longer needed. And Harmony's responsive browser-based design adapts to the desktop or a mobile device, so data is accessible at any time and place.

Comparison View allows quick scrolling through selected images and reports. Clicking on an image or report thumbnail enables interactive analysis. Zoom in and pan out on fundus images, scroll through OCT B-scans and view images and reports from multiple instruments side-by-side. The interactive Timeline Graph illustrates when each exam was performed and enables historical comparison by month or quarter.

For more information, **contact Christina Kirby** at ckirby@topcon.com.

"**I need** to increase safety and grow my practice while providing uncompromising care."

# With Topcon RDx Now You Can.
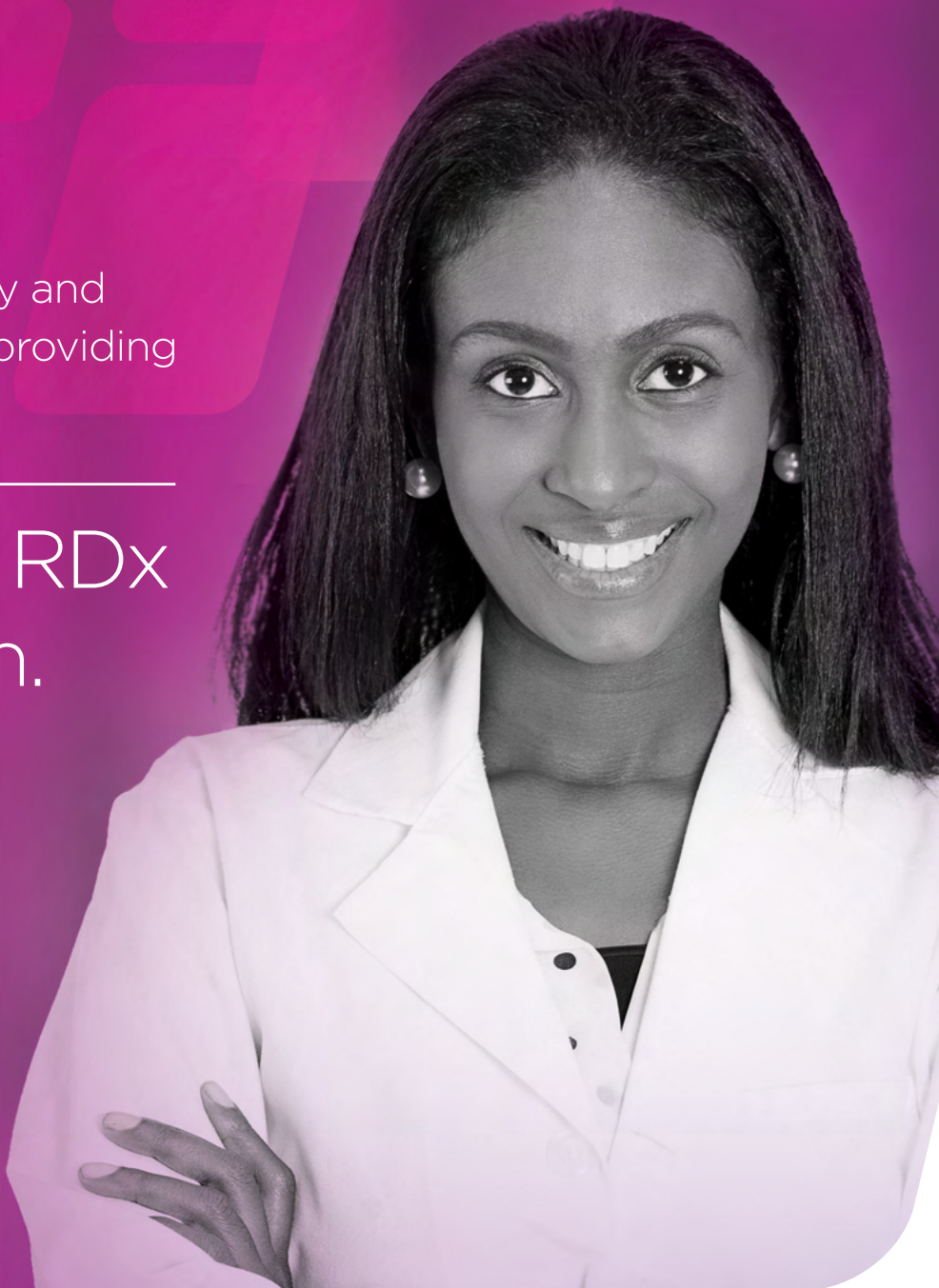
**Introducing Topcon RDx®, a comprehensive eye health exam platform** that incorporates automated and remote capabilities for your diagnostic instruments. Now you can perform refraction from anywhere. Discover how Topcon RDx can help you expand the care you provide to your patients beyond the physical location of your practice.

## TOPCON Healthcare

SEEING EYE HEALTH DIFFERENTLY

To learn more, visit us at
**www.topconrdx.com**

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# Review of Optometric Business

Thanks the sponsors of this Special Report on

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## Tapping Into a Megatrend

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