Current Perspective

David W. Parke II, MD Ophthalmology and Remote Work

or over 25 years as a clinically active ophthalmologist, I awoke every workday morning, put on a dress shirt, tie, and (generally) a suit, and I went to the clinic or to the OR to work. Practicing ophthalmology meant continuously and directly interacting with patients and staff. Whether it was doing indirect ophthalmoscopy, office lasers and intravitreal injections, or OR microsurgery, my responsibilities couldn't be delegated to instruments or other people. It was a central tenet of my professional existence.

The COVID-19 era has detonated an explosion of "remote work." Tens of millions of people have discovered that not only can they be effective working from home, but they also prefer it, and they think they may even be more productive. In mid-2020, a host of major companies and professional firms moved many positions to full-time permanent remote work. Many other companies dramatically expanded the number of positions that could work part-time from home or another remote location.

Initially, the advantages seemed obvious. Instead of 40 minutes to the office, it was 40 seconds to the laptop. Some models showed that elimination of typical commuting and parking obligations generated the equivalent of an additional 40 days a year. No costs for parking or gas. Flexible hours. Fewer coworker distractions. Multiple surveys revealed that over 50% of newly "remote workers" wanted to remain mostly remote after COVID-19.

For employers, this raised a host of new issues. What about those types of businesses where most of the employees can't work remotely? How do you onboard new employees when some may not physically meet another employee for months? How do you maintain a corporate culture? How do you optimally manage and evaluate remote workers? How can you ensure that they are performing to their capabilities? What do you do about all your now-underused office space? And can you then accommodate the remote working staff who decide they've seen enough of their family and not enough of their work friends and want to come back in person? It's a thoroughly complex and dynamic problem in evolution. We at the Academy are working through many of these issues ourselves.

The practice of ophthalmology itself may be on the cusp

of a fundamental change of its own—not tomorrow, but likely within the next decade.

First, consider changes in the concept of "a complete eye exam." Every patient does not need the same standardized elements. For instance, does a 6-year-old with amblyopia really need an intraocular pressure (IOP) measurement? And doesn't a patient with an IOP of 30 mm Hg need more than confrontation visual fields—and what about gonioscopy? Moreover, many of my retina colleagues will argue that in following many patients with neovascular macular degeneration the most essential follow-up exam element is the macular OCT.

Next, consider emerging technology. The "internet of things" devices, home monitoring tools, 5G connectivity, artificial intelligence (AI), and synchronous and asynchronous teleophthalmology will combine to create a continuum of eye care of which the ophthalmologist's office is only a component. It is very easy to understand how home monitoring of visual function, visual fields, and nerve fiber layer integrity uploaded into a predictive analytics AI system could fundamentally alter the optimal management of many glaucoma patients. Similar statements can be made for diabetic retinopathy, macular degeneration, and other major public health issues in eye disease. The technology isn't yet mature, but with maturing markets, it is only a matter of time.

I don't mean to imply that ophthalmologists will become remote workers, spending their days in front of a screen at home with a cappuccino. But just as with other sectors of the economy, the COVID-19 disruption is focusing increased attention on the rational evidence-based inputs, processes, and technology needed to provide optimal quality of care outputs for the most people with the lowest aggregate cost.

Ultimately, we have learned that nothing beats face-toface interaction to build trust and confidence and informed decision-making. But new technology, better science, issues of cost and system capacity, and changing acceptance of new methods by patients and physicians combine to predict a different scope of ophthalmologic "work." The optimal outcome will not be achieved by passively assimilating change but by actively exploring the possibilities and the enhanced role of the ophthalmologist.