

THE FUTURE IS HERE: AI IN EYE CARE



The successful incorporation of an AI system into practice could revolutionize patient care.

BY SELINA R. MCGEE, OD, FAAO

I is revolutionizing various fields of medicine, including optometry. Rather than worry that a machine will replace you, be concerned that without the right set of tools, including AI, you won't be able to offer the best patient care possible. As the need for our services continues to grow, we must adopt and adapt. Here, I introduce an AI program that has helped me take my dry eye practice to the next level.

AI ADOPTION

Personalized medicine is a growing trend across all medical fields, and optometry is no exception. My

practice was built with the goal of offering a customized experience for my patients and my team. I rely on Al to assist in the customization of a patient's lens to treat and manage myopia and keratoconus. Al also helps design personalized refractive surgery plans based on a patient's unique eye measurements and visual needs. This level of personalization optimizes the care of each of my patients, reducing the likelihood of complications and improving overall satisfaction for the long haul.

I recently incorporated CSI Dry Eye Software into my practice. This Al-based program houses all my patients' information and treatment

plans in one place. It has each patient fill out a detailed lifestyle and medical questionnaire before coming into the office, as well as the typical SPEED questionnaire. It then combines the results with the data collected in the office, incorporating both into a suggested treatment plan based on a preprogrammed algorithm that takes into account everything from osmolarity to tear breakup time. I have found that this tool complements me and my ability to diagnose, educate, and manage my dry eye patients.

Other AI tools and technologies available that may be of benefit to the optometric practice include

ALTHOUGH OPTOMETRY HAS ONLY JUST BEGUN TO INCORPORATE AI IN THE DIAGNOSIS AND TREATMENT OF PATIENTS. THE TECHNOLOGY IS ALREADY POISED TO **REVOLUTIONIZE OUR PROFESSION AND** THE WAY WE CARE FOR OUR PATIENTS.

Al-powered appointment scheduling, Al-driven platforms by Optain and Eyenuk to screen and grade eye conditions, Chatbots to answer common questions on practice websites, digital personalities like those offered by AVTRMed to help bridge staffing gaps and improve clinic efficiency, and digital health information platforms that include Topcon's Harmony, which now features privacy-enhancing capabilities provided by BeeKeeperAI.

AI CONSIDERATIONS

Although the integration of AI in optometry offers numerous benefits, it also raises important ethical concerns. The primary concern I hear from fellow doctors is that AI will replace humans. We can all agree that it is essential that AI remains a tool to supplement, rather than replace, the clinical expertise of optometrists. It is up to us as a profession to ensure that our services aren't fragmented. We cannot allow others to dictate what

constitutes the practice of optometry to the detriment of our patients' care.

There are also concerns about data privacy and security, particularly given the sensitive nature of medical information. Ensuring AI systems comply with regulations and safeguard patient data is critical to maintain trust in these technologies.

Additionally, the implementation of Al in optometry requires a significant time and financial investment in both technology and training.

GET ON BOARD

Although optometry has only just begun to incorporate AI in the diagnosis and treatment of patients, the technology is already poised to revolutionize our profession and the way we care for our patients. The future is here, and we must position ourselves to harness its full potential.

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