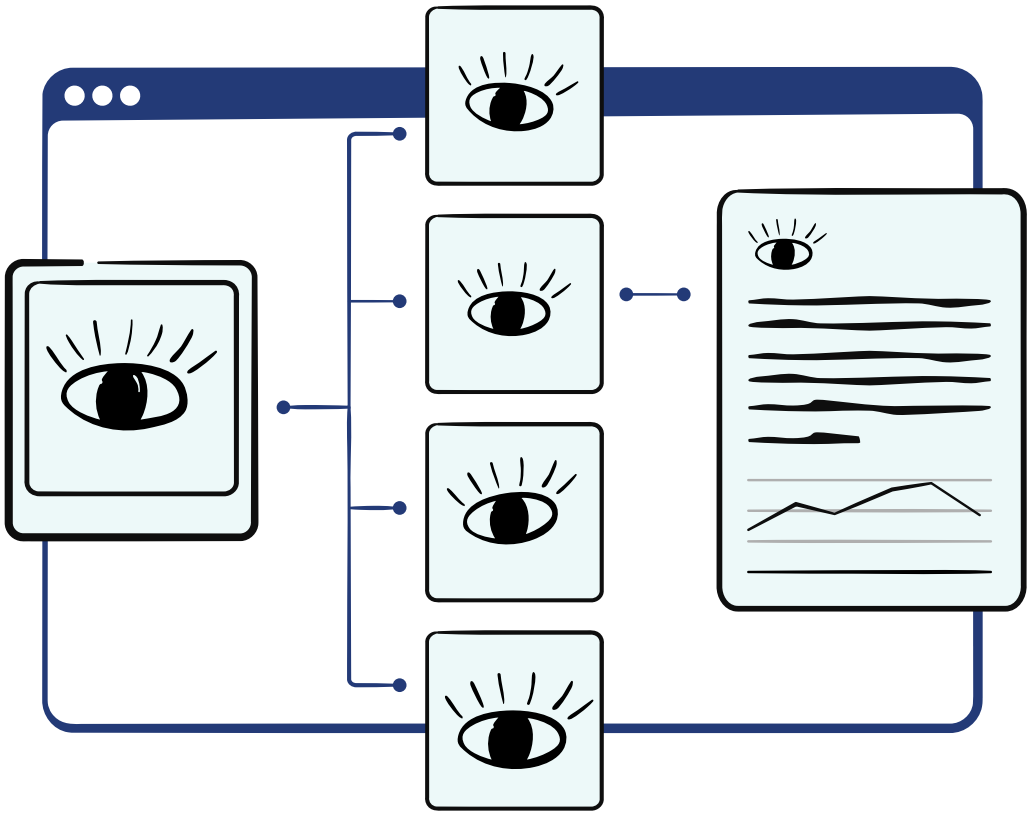


Eyecare Delivered “On The Go”

An Eyecare Delivery Guide for 2026 and Beyond

Q4 2025

Deya

Summary

The eyecare industry is on the cusp of a significant transformation, driven by AI-centered technologies that promise to enhance both the business functions and clinical patient care aspects of eyecare practices. While AI has already improved some administrative tasks like automated patient reminders and call management, the next frontier involves integrating AI into direct patient care, particularly through tele-eyecare. New solutions, such as the Deya connected care platform, aim to extend care beyond the physical clinic by enabling asynchronous doctor-patient connections via the patient's smartphone, allowing for remote monitoring of acute and chronic conditions. This shift aligns with the increasing consumerism in healthcare and the need to reduce provider burnout and staff stress, ultimately leading to improved patient adherence, retention, and satisfaction, and deepening the doctor-patient relationship.

Key Points

- AI will transform eyecare, moving beyond practice administration to direct patient care via tele-eyecare.
- The Deya connected care platform enables remote, asynchronous doctor-patient connections for clinical monitoring.
- Professional associations, such as the AOA and AAO, endorse telemedicine in eyecare under the supervision of ECPs, prioritizing doctor-centered care and positive patient outcomes.
- Deya addresses the trend of healthcare consumerism, reduces provider burnout, and improves patient engagement.

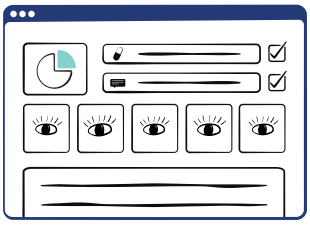
Tech-enabled Eyecare Today

Eye Care Professionals (ECPs), both Optometrists and Ophthalmologists, have been monitoring the technology sector of the eyecare industry for many years, in particular for Artificial Intelligence (AI) tools that would be game-changers for their productivity. Outside of edge cases, the overwhelming majority of ECPs are not using AI-enhanced services in their delivery of eyecare. At best, those trying to define the intersection of AI and eyecare delivery have only been able to explain the early examples of services that will transform the eyecare practice – with examples like scribes that promise to shorten the provider's interaction with the EHR, or reviews of patient diagnostic exams from devices like OCTs that will offer clinical decision support.[1,2]

This is not to discount the potential of AI-centered tools that deliver enhancements to the business functions of an eyecare practice. Traditional patient communication systems that performed automated text message delivery for appointment reminders and "eyewear ready" notifications have been infused with expanded capabilities that focus communications on the most critical patients in the practice. Furthermore, telephony systems now manage both inbound and outbound calls through AI technology, including realistic voice agents that interact with patients in a highly capable manner.

With staffing challenges being the primary issue for most eyecare practices, the financial return-on-investment of these types of AI-centered tools is easily calculable. When an agent or scribe can decrease the practice's dependence for more staff or allow a practice to reassign personnel to more patient-facing activities, the math is simple because most practices know their revenue-per-employee metric and can determine how many tens of thousands of dollars will drop from the expense category to the bottom line.

But when contemplating how to change the patient's clinical care experience, both in how the care is delivered and how doctor-patient conversations transpire related to their medical care, ECPs aren't yet seeing clear options, but they are coming.



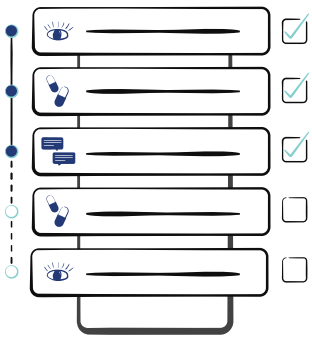
The eyecare business will financially benefit from AI-driven enhancements in patient care, particularly in the area of tele-eyecare. There will be personnel savings, reduced clinic disruptions from outside patient calls which leads to more availability for in-clinic care, and also decreased strain on the patient care schedule giving rise to more open availability for high revenue patients, including new ones, to join the practice. Furthermore, highly-connected patients become much more likely to return for repeat care because they gain a new appreciation for the depth of relationships the practice is creating with them.

In 2026 and beyond, new solutions will be brought to market that aid the ECP in clinical patient care and communication beyond the clinic. This paper outlines the emerging paradigm in eyecare delivery where ECPs can leverage AI-centered technology to impact both.

Changing the Eyecare Delivery Paradigm

Consumerism of healthcare has been sharply increasing since 2020.[3,4,5] This is true in eyecare service delivery and also, quite obviously, the patient-chosen vendors from whom they purchase their vision-correcting eyeglasses and contact lenses.[6] The intra-pandemic development of tele-eye-health services led many ECPs to dabble in the use of web technologies. They used tools to provide triage services all the way through the delivery of primary eyecare examinations using technology to put a remote doctor in control of the patient's care while technicians performed the in-office procedures.

More broadly, all of healthcare has seen this shift toward consumerism. For example, dermatology patients can be encouraged to submit photos of their skin conditions to their doctors who then contact the patient to arrange an appropriate consultation. Also, people at-risk for sleep apnea are given a home monitoring device to use while sleeping over one night, and then are provided a tele-consult with a sleep care specialist who tells them the results and directs them toward necessary therapies.



These modifications of healthcare delivery are meant to match the patient where they are, reducing the complexities of multiple in-clinic visits and allowing the patient to be seen when and where they choose.

These care delivery models don't alone signify consumerism, which is meant to convey the idea that patients are moving the demand needle for their healthcare to be delivered when and where they want it, but it aligns nicely. Patients do the calculations in their heads about how long it takes to drive to and from their doctors' offices, how much time they spend in waiting and examination rooms before they are served, and their conclusion is that in many cases they are being played by the healthcare system. When billing statements to their health insurance show hundreds of dollars of billed fees for a four-minute interaction with a provider, the mood sours. As a result, patients increasingly search for quicker avenues to receive care, and when appropriate, are happy to accept telehealth services if offered.

The providers and healthcare systems who deliver telehealth care surely benefit as well. Every hour of clinic time has a revenue opportunity and an expense offset. It's easy to see that there is substantial overhead to a practice processing a patient. Not just time spent by the doctor, but by the reception staff, technicians and nurses doing workups and patient flow coordination, and the rest of the team that needs to see the patient to their endpoint of the visit at checkout with coordination of future care and billing/coding, culminating with the now-common offer to hand out a printed after-visit summary document. Telehealth can transcend many of these friction points, and providers should be eager to consider their options.

But as the mid-2020's have arrived, options aren't readily available to allow an ECP to begin to transcend their care delivery to include tele-eyecare systems. And without options, natural curiosity doesn't grow. Out of their line of vision, software companies have been developing technologies that will provide the first steppingstone on the path to changing the eyecare delivery paradigm. They promise to increase ease of patient access, providing the ECP with more productive time on their calendar by reducing routine in-clinic follow-ups, and increasing communication capabilities to ensure that patients are informed, educated, and appropriately engaged between in-clinic visits.

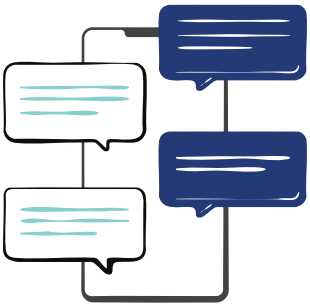
Considerations for Use of Tech to Transform Patient Care Delivery

Primary considerations for implementation of new technology include reducing provider and staff burnout, decreasing dependency on staff load, and demonstrating an advanced practice ideology. Rarely does the practice consider lessening the load on the patient or reducing the cost of health care delivery.

Technology-centered approaches to patient care happening in-clinic are expanding. The percentage of patients receiving dilated fundus examinations as part of periodic comprehensive eye examinations would seem to be dropping due to the adoption of widefield non-mydriatic imaging systems.[7,8] Transformative vision therapy systems can now be delivered through electronic tablet computers used by patients at home.[9,10] Development is ongoing to increase accuracy and usability of home tonometers and OCTs.[11,12] The examples are nearly endless.

A key area where digital technology can positively impact the experiences of both doctors and patients would be remote eye assessment technology to monitor anterior segment diseases. In cases of anterior segment triage for acute conditions, it's highly likely that patients would use a secure software app to transmit eye images and symptoms to their doctor. Interviews with ECPs today show that it's quite common for patients to text self-taken eye images to their doctor or clinic for an initial virtual assessment. But such processes are not secure, leaving the ECP without a way to easily close the communication loop, and of course in virtually no case does the ECP get paid to render such advice.

For conditions of the adnexa and anterior segment (not including deeper conditions like cataract and glaucoma), ECPs see patients for follow-up visits that tend to be mundane but necessary, while otherwise often skipping important follow-up care for many reasons: concern about overpopulating the schedule with short, less revenue-capable visits; preferring to keep the schedule open for new patient encounters or consultations; or inability to properly throughput patients in an efficient manner.



Thus, it seems logical that ECPs might give consideration to technology systems that would help them transform some of the care they deliver, especially if it were parallel to current systems that are not robust nor secure (e.g. text messages of eye photos). Any such system would need to employ EHR-like security standards, offer robust bidirectional messaging and communication capabilities, and provide both patient and doctor with simple but incredibly effective means of tracking symptoms and treatment compliance. Even better would be if such a system had "AI inside" that delivered diagnostic guidance, messaging simplicity, and reduced friction of use.

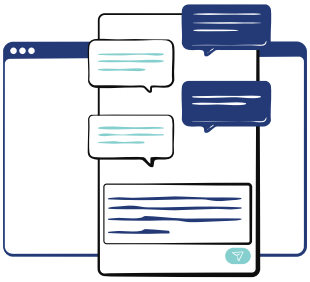
Eyecare "On The Go" – Acute Care

You've surely experienced this: a trusted patient of the practice has awoken to a crusty, inflamed eye, and they take a photo and text it to the clinic with hope for advice. They want advice on treatment and, if possible, to avoid coming to the clinic. And they aren't aiming to pay for the doctor's consultation.

Let's consider a new way to care for this patient, with the ECP delivering eyecare "on the go." This patient is told by the clinic that their doctor is going to monitor all of their patients with a new smartphone app which is connected directly to the doctor's computer. Essentially, the patient's smartphone has become an extension of the clinic.

Both patient and doctor participate in their part of the eyecare relationship when they have time, asynchronously. So to describe the new steps for our crusty eyed patient:

1. The patient takes an "Eye Selfie", enabled by voice controls in the app that helps the patient optimize phone position and lighting conditions.
2. The patient logs answers to a set of eye condition questions that creates a case history of the current situation.



3. Through a cloud-based, AI-supercharged analytics system that has been trained by ECPs, the eye images and case condition log has been analyzed and put into a report for the patient's ECP.
4. The ECP logs into the doctor hub when convenient in their clinical day and reviews the prospective diagnosis and recommended messaging that the AI system has created, allowing the doctor full control to make the official diagnosis and amend patient message for treatment or other commentary.
5. The ECP either decides to monitor the patient remotely through ongoing "Eye Selfies", all of which are CPT billable, or instead recommends an in-clinic visit.

In this case, the patient and doctor are literally tethered by technology. They are both benefiting from time savings and streamlining of care, and the doctor is the authoritative source of diagnostic and treatment processes, while AI is enhancing all of it!

Eyecare "On The Go" - The Long Run Patient

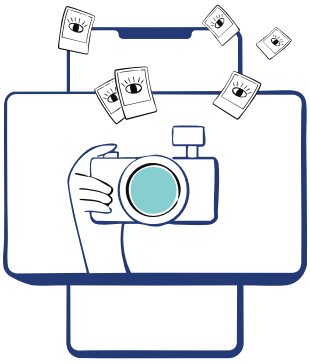
The other use case for such technology is for the patient who has been monitored for a chronic eye condition. In these situations, the ECP feels that there is value, even if limited, to bringing the patient back for in-clinic assessment to confirm that the original condition is improving or perhaps even has resolved. In either case, most ECPs find the follow-up process to be mundane and perhaps not clinically needed, but when patients are guided carefully through the resolution of their issue they tend to be much more willing to remain engaged with their ECP into the future. So they schedule in-clinic follow-ups that are time consuming for the patient and the clinic staff, and offer the doctor a short look at the condition's progress. As an alternative, the use of the same technology proposed above for the acute care patient can be applied to these patients who need to be seen over the long run.

For example, consider slow responding conditions like chronic squamous blepharitis or simple episcleritis. These patient conditions often necessitate in-clinic assessments to monitor clinical improvement, at the doctor's discretion. But in these cases, and others, patients can alternatively be directed to the smartphone app for maintenance tele-eyecare overseen by the ECP.

Just as with the steps for the acute care patient, the smartphone app helps the patient document their condition and the doctor hub allows for it to be professionally monitored from afar by the ECP. Patients still receive periodic reminders to take an "eye selfie" so the AI-powered engine can work for the ECP to assess improvement (or worsening), and they provide symptom check-ins which are also read by the AI system to indicate to the ECP their trend toward improvement.

Equally important, the patient conversation system between the patient app and the doctor hub allows for HIPAA-compliant communications about the patient's medications or other treatments, or to answer patient questions that otherwise would be left to phone calls. No current EHRs or associated patient portals provide ECPs with live, asynchronous conversation platforms that afford these sort of intimate, patient-endearing exchanges. The technology leverages AI to build conversation elements, reducing time spent by the ECP to create messages while delighting the patient that they have a direct line to their doctor. And the system can allow others in the clinic to monitor messages, keeping the ECP from getting into "inbox hell."

For patients who are being cared for over the long run, technology that hasn't existed until today can increase their satisfaction from the care of the ECP, improve their outcomes, and deepen the relationship which will result in a more committed patient than ever before!



The Opportunity: Transform the Patient's Smartphone into an Extension of the Eye Clinic

Currently, content in numerous eyecare information channels relates to how AI is transforming the delivery of eyecare and the management of eyecare businesses, along with how to properly implement these strategies.[13] It's talked about as though AI is an entity in and of itself, something that comes in some sort of form that will do some sort of job. The tasks are outlined with detail, but how they are done is rarely defined in detail.

Now, the eyecare industry is being presented with a first-of-its-kind connected eye care platform called Deya. Its goal is to extend your practice outside of the walls of the physical clinic by intimately connecting the doctor to the patient. Functionally, Deya delivers all of the capabilities expressed above by providing asynchronous connectivity so patients can log their symptomology and treatment compliance, yet also be participants in their own physical exam of the anterior segment of their eyes via "eye selfies." Furthermore, the doctor hub allows presentation of patient cases, where AI assists the doctor in providing streamlined diagnostic considerations and patient conversation starting points.

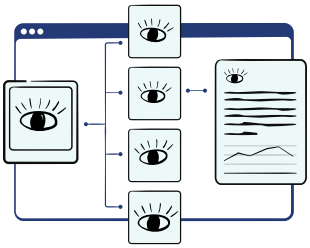
Deya allows ECPs to remotely manage acute and chronic anterior segment conditions through a real and personal tech-enabled doctor-patient connection. And it does so in a way that allows for the care rendered to be compensated by CPT billing. Deya is an extension of the ECP's clinic.

Tele-eyecare is Considered Standard of Care

ECPs have immense responsibility for the wellness of their patients' eyes, and a clear code of conduct in delivering care that is unique and useful to the patient's condition. The major North American professional associations, including the American Optometric Association (AOA), the American Academy of Ophthalmology (AAO), and the Canadian Association of Optometrists (CAO) are monitoring developments in the tele-eye-health arena, with positions that necessitate a doctor-centered approach that secures positive patient outcomes. The 2025 position paper from the AOA says that it "supports the use of telemedicine in optometry to access high-value, high-quality eye, health, and vision care" especially when it "protects and promotes the doctor-patient relationship."[14]

These standards are at the core of Deya's incredibly powerful technology. With leadership from both Optometry and Ophthalmology, the system provides practice optimization to reduce administrative burden of caring for patients while streamlining communication to the level of actual doctor-patient conversations about care, treatment, and follow-up. With greater efficiency to see anterior segment acute and chronic cases, ECPs will experience reduced burnout and staff stress.

Most importantly, practices will see measurable improvements in patient adherence, retention, and satisfaction while enhancing their reputation in the community. Patients will benefit from feeling deeply connected to their ECP, while being granted the opportunity to let technology reduce their burden to receive quality eyecare. Patients can reduce time off from work, driving to and from the clinic, and waiting at the clinic to be seen by the ECP. And the ECPs will ultimately have the opportunity to be compensated for digital e-visits, standardizing an approach that has otherwise been done through text, phone, and portal messages with no compensation for the ECP.



The Future of Eyecare Delivery: “Follow with Deya”

ECPs have commonly noted in their EHR that anterior segment conditions can be monitored at the patient’s discretion, writing notes such as “return to clinic if condition worsens.” The lost opportunities to document a patient’s resolution, to monitor the impact of proper medical therapy, and to derive revenue for appropriate eyecare are substantial.

Never before has the patient been invited to be partnered so closely with their ECP on their eye health care journey. From patients providing the case history and eye images for Deya’s ECP-trained AI engine, to the doctor being delivered that AI analysis and empowered to monitor the patient’s condition and provide treatment, to the immense value of a secure electronic communication channel through which the doctor and patient can converse about “what’s next,” Deya brings it all. And it does so in an asynchronous, “do it when you have time” approach for the ECP.

The future paradigm of eyecare delivery is one that transforms the patient experience so they can feel in control of their journey, while assuring the ECP that they are caring for their patients in the most professional manner possible. Delight patients by expanding your care beyond the clinic to boost engagement, outcomes, and satisfaction. When an ECP implements the Deya connected care platform, they can change their clinic notes from “return to clinic if condition worsens” to “Follow with Deya.”

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