PRACTICAL AI TOOLS

Exploring potential uses in the ophthalmology clinic.

BY ROBERT T. CHANG, MD

AI is being used in many aspects of daily life, so it is reasonable to question how it could help with day-to-day ophthalmology practice. In some ways, AI seems like a superpower: Tasks that would have previously taken hours can be accomplished within minutes.

Although there is concern about AI hallucinations, or inaccurate outputs, the technology is rapidly improving, and conversational AI is becoming more realistic. Improved model prompting—providing a model with more specific inputs—can also yield better outputs.

Studies have already shown that large language models can pass the Turing test, which is an assessment to determine AI's ability to imitate human intelligence in conversation with a human. When ChatGPT 4.5 (OpenAI) was prompted to adopt a human-like conversational persona, humans thought it was a real person 73% of the time.[1]

Large language models are now evolving into AI agents, which are programs that can autonomously perform tasks and execute commands on behalf of the user based on the inputs received. This article reviews specific applied uses of AI in the clinic, with a focus on a few existing tools that use AI agents to enhance workflow efficiency.

VIRTUAL SCRIBE

In the clinic, some ophthalmologists utilize a human scribe to listen to conversations with patients and take notes on a computer. Could a virtual scribe perform this task if it could understand the doctor-patient conversation? Yes, it could, and software to support this application is already available.

A virtual scribe can accomplish a variety of tasks, including the following:

- Create a summary note of the doctor-patient conversation;
- Suggest International Classification of Diseases 10 and Current Procedural Terminology codes based on the visit;
- Prepare test orders and prescription refills;
- Create an after-visit summary; and
- Script answers to patient messages.

What does a virtual scribe look like? In my clinic, the ambient listening takes place via a smartphone app. The technology required is built into Epic Haiku, the Epic software used for the electronic health record system at Stanford Health Care. All I need to do is obtain the patient's permission and click record. When I finish the office visit recording, the AI software generates a summary of the entire conversation with medically relevant inputs within 30 seconds.

Stanford Health Care has adopted this technology system-wide, with DAX Copilot (Microsoft) now used for virtual scribing across all clinics. In addition to automating notes, DAX Copilot supports AI-generated documentation for encounters in multiple languages. The user can employ a translator for any language or conduct visits in Spanish without a translator, and the program will generate a summary in English for the electronic health record.

Initially, the program was best used for history-taking because of limitations in specialty-specific language. Now, AI inserts the relevant information into a custom medical visit template, the same way a human scribe would. The program can also suggest replies to patient emails, allowing the clinician to provide a faster and more detailed response.

An AI competitor to DAX is Abridge (Abridge). Every Abridge-generated clinical note automatically includes a patient visit summary with a plan and instructions in patient-friendly language, written at an 8th grade reading level. The clinician can simply verify and edit the summary as needed, lessening time spent on documentation.

AI-Based Resources

VIRTUAL SCRIBING
▶ **Microsoft DAX Copilot** | microsoft.com/en-us/health-solutions/clinical-workflow/dragon-copilot
▶ **Abridge** |abridge.com

AI PHONE MANAGEMENT
▶ **Phonely** | phonely.ai
▶ **Ufonia** | ufonia.com
▶ **Assort Health** | assorthealth.com

PHONE MANAGEMENT

Phone agent software can conduct human-like conversations with callers and complete appropriate tasks based on the communication, such as scheduling an appointment or ordering a prescription refill. Phonely (Phonely) is an AI phone agent that allows the user to input a variety of information and tailor the AI to their needs. The user can design an agent personality with traits such as casual, funny, direct, or formal; these preferences then dictate how the agent behaves during patient conversations. The user can also assign a job role to the agent and select a voice that aligns with a specific accent, region, language, or sex, or they can clone their own voice for this purpose. To allow the phone agent to provide accurate and relevant answers, users can also input company information by importing files or website URLs.

Next, the user creates a workflow, which allows Phonely to follow set scripts during a conversation. The software listens for specific conditions, and once those conditions are identified, the software runs through the workflow to answer them. Based on the information gathered and the direction of the conversation, the caller could eventually be transferred to a human if it is determined they do not want to talk to AI any longer. There is now eye care–specific software available, such as Ufonia (Ufonia) and Assort Health (Assort Health).

CONCLUSION

As ophthalmologists and practice staff members seek ways to make patient visits better, faster, and more informative with thorough instructions and fewer callbacks, the solutions are likely to involve AI. Given AI's capabilities, both excitement and fear surround its development. However, the technology will not replace the ophthalmologist's role in these in-clinic responsibilities but rather upgrade it to manager of AI agents. ∎

1. Jones CR, Bergen BK. Large language models pass the Turing test. arXiv. March 31, 2025. Accessed November 24, 2025. https://arxiv.org/pdf/2503.23674

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