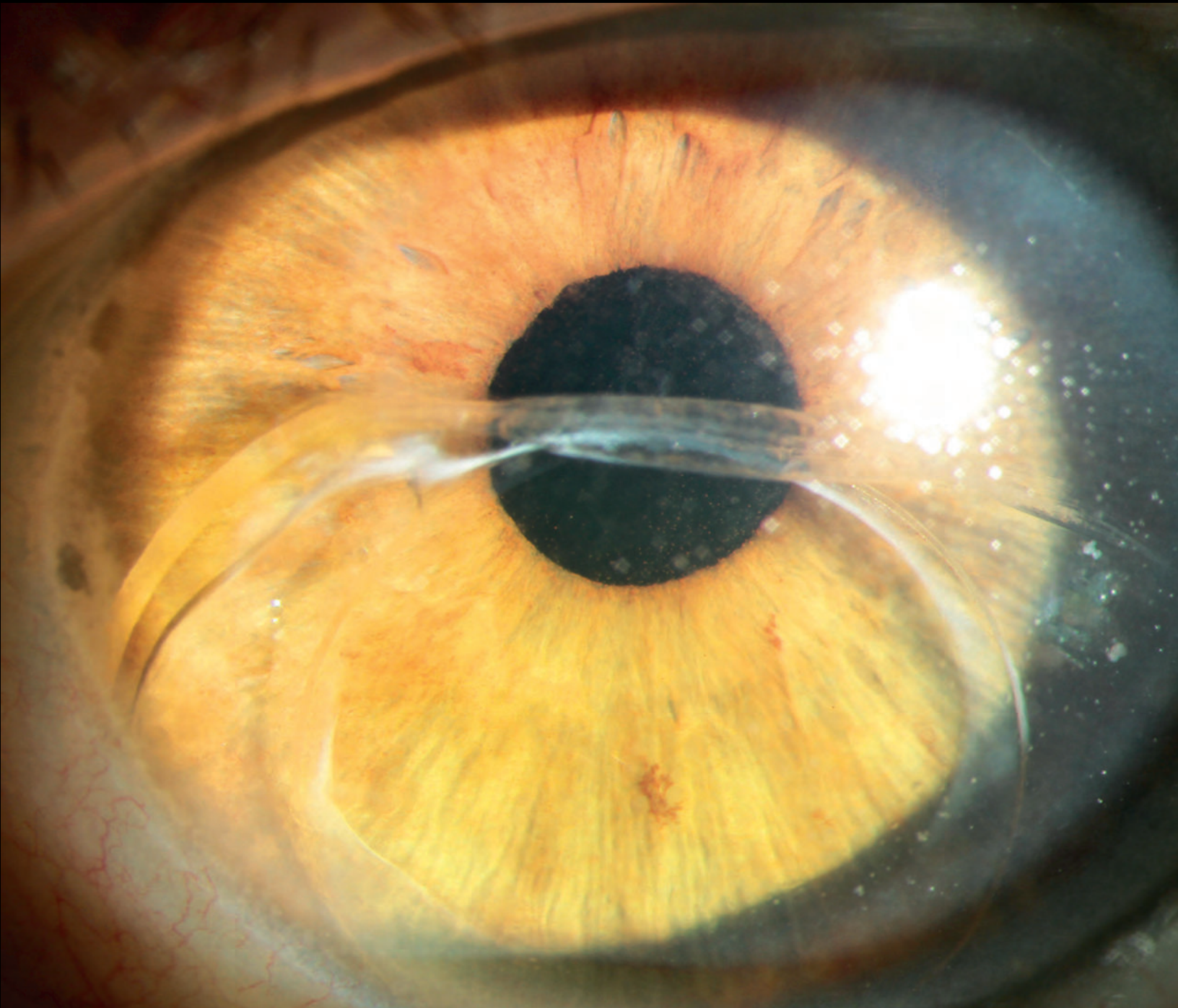


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20 North Wacker Dr.
Suite 2030
Chicago, IL 60606
phone: 312-578-8760
www.asrs.org

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On the Cover



Most intraocular lenses (IOLs) sunset into the depths of the vitreous. With the change to daylight saving time, however, this IOL followed the "spring forward" mantra and prolapsed into the anterior chamber!

Ophthalmic photographer: Laura Hynes

Physicians: Harry Dang, MD
R. Rishi Gupta, MD, FRCSC, FASRS
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Halifax, Nova Scotia, Canada

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Joel Pearlman, MD, PhD, FASRS
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joelpearlman@gmail.com

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Going Virtual: Our Experience With Remote Scribes

Since the early days of the pandemic, health care staffing shortages have become an increasingly present—and disruptive—part of clinic life. Shortages in clinical staff roles prove especially troublesome given the integral role technicians and ophthalmic scribes play in patient care, and the associated training burdens required to make them highly proficient.

PRISM Vision Group, like many administrative service organizations that support ophthalmology practices, relies heavily on the expertise of trained ophthalmic scribes who assist physicians in administrative aspects of the exam. Given the highly proximate nature of scribe-physician interactions, few vocational bonds are tighter than that of physicians and their scribes.

Virtual scribes: A pilot is born

Losing a highly capable scribe can be painful; losing one to relocation or another logistical reason unrelated to job satisfaction only exacerbates the pain. To retain scribes, leaders in eye care and at PRISM have considered the idea of a virtual scribe: a trained ophthalmic technician who remotely supports a physician before and during the patient exam, utilizing technology and remote access to the electronic medical record (EMR).

While the virtual-scribe concept is a novel idea, administrators and physicians initially tabled it out of concern that scribes needed to be on site to optimally perform their role.

Then, in February 2020, just prior to the pandemic, a well-regarded scribe at PRISM moved out of state to be with family. Initially the scribe worked remotely in an administrative role. Soon, as the pandemic heightened, staff shortages and callouts reached a climax. A day came when there simply weren't enough in-person technical staff to accommodate operations at a New Jersey retina practice.

Nancy Reynoso, lead administrator of retina services at PRISM, recalls, “When the pandemic came into full force, our staffing issues started worsening. We decided after much debate and thought to pilot a virtual

scribe program with our ex-scribe who moved out of state.”

The virtual scribe program began with a physician receiving a call from the out-of-state scribe and communicating via microphone-enabled wireless headphones. An in-office technician was on hand in case a room needed to be prepped or a drug retrieved.

‘A virtual scribe [is] a trained ophthalmic technician who remotely supports a physician before and during the patient exam, utilizing technology and remote access to the EMR.’

The physician guided the virtual scribe through a day's worth of exams, as the scribe kept the medical chart open and updated on their end. The physician was able to see all their patients and the charts were updated accurately and comprehensively.

Scaling a virtual scribe program

What started with the basic idea of a scribe telephoning a physician and filling out the medical chart evolved into a more robust organizational competency. The next step was determining how to scale the program to increase virtual scribes' access to other retina specialists.

As the pandemic wore on, the need for proficient scribes at PRISM's Washington, DC-Maryland-Virginia (DMV)-affiliated retina practices exceeded the existing workforce. Social distancing, callouts, and recruitment difficulties left operations vulnerable.

Eric Weichel, MD, a retina specialist at one of PRISM's DMV affiliate offices, recalls, “There were occasions when up to 30% of the clinical staff were home recovering from COVID.” Clinicians were eager for something flexible and innovative to ease the strain created by chronic staff shortages.

The pilot program in New Jersey showed promise. PRISM CEO Steve Madreperla, MD, PhD, recalls, “We were excited by the potential of the pilot program, and initially thought about how to scale it up. First, we contacted companies set up to outsource remote scribing. But because of the need for scribes to understand our EMR system and culture, we thought it easier and more efficient to hire remote scribes internally.”

So, in 2022, DMV physicians and administrators endeavored to formally adopt the virtual scribe option. Practice leaders devised an operational workflow that would require no added overhead or significant training.

Technologically, the program relied on a combination of Zoom communication and Bluetooth headphones. The virtual scribe would log on to Zoom as an administrator and queue up the medical chart. A technician at the office would load the exam rooms and ensure each computer was connected to the same Zoom meeting.

The physician, on-site technician, and virtual scribe would all connect to the same Zoom meeting on their respective devices, and the

virtual scribe would “admit” each patient to the meeting from the virtual waiting room. A Zoom for Healthcare account and dedicated virtual waiting room ensured Health Insurance Portability and Accountability Act (HIPAA) compliance.

Logistically, the physician would wear Bluetooth headphones, walk into the room, greet the patient, and announce that they had a technician working remotely. The local in-office technician (ideally also wearing wireless headphones) would connect to the meeting on a mobile tablet and listen to the conversation, providing support without the physician needing to leave the room.

Patients often marvel at how the medical chart seemingly updates itself—and how the in-office tech seems to magically enter the room to bring the necessary materials for a procedure just when the physician describes the plan for the procedure to the patient.

“It was awkward at first since most patients had difficulty with the concept of a remote scribe,” Dr. Weichel recalls. “However, it did not take long to explain that the scribe was virtual, and every patient understood the concept of a Zoom meeting.

“Two months after switching from an in-person scribe to a virtual one, I realized the enormous benefits of a virtual scribe,” Dr. Weichel adds. “They did not need to be near the office with the patient but could be located anywhere with reliable high-speed internet access. The delivery of care has remained constant, so the patients aren’t aware of any changes.”

While physicians and administrators alike initially were skeptical of the concept of a scribe working from home, the implementation worked from the beginning. Communication improved vastly as the physician, tech, and scribe all connected to one modality and engaged in an exam simultaneously.

A 2-monitor setup in the exam room allowed simultaneous viewing of optical coherence tomography, fluorescein angiography, and EMR notes by the physician during the visit, with scribe and physician viewing the same EMR screen. The mobile tablet gave the in-office technician greater visibility into exam details and timing—and having fewer people in an exam room allowed added comfort for the patient and mobility for the physician.

For all of these reasons, the program continued to build steam in the DMV in 2022 and 2023, as the number of physicians exposed to

virtual scribes expanded from 1 or 2 to 25 or more retina specialists.

Early successes

Although the virtual scribe pilot program began in early 2020, the program was not formalized until mid-2022. PRISM has learned a remarkable amount about the pros and cons of operating such a model over the last few years.

‘Two months after switching from an in-person scribe to a virtual one, I realized the enormous benefits of a virtual scribe.’

—Eric Weichel, MD

Technology

From a technological standpoint, few additional investments or modifications were needed to operate the program, and all technology utilized was familiar to the users. Virtual scribes and in-office technicians needed additional laptops or tablets and wireless headphones, but the cost paled in comparison to the return on investment. The EMR required no updates and was loaded on the virtual scribe’s computer. Zoom allowed continued use of a familiar communication platform.

Staff callouts

PRISM experienced a remarkable reduction in scribe-related callouts in the virtual scribe cohort. Staff callouts—when a technician or scribe takes unscheduled leave at the last minute, causing the office to be short-handed—are all too familiar to medical practitioners.

“One of the biggest stressors in our practice has been technician callouts,” says Alex Melamud, MD, MA, of PRISM’s DMV division. “In the past, we have asked technicians from other offices to travel to the understaffed location to provide coverage. This is highly unpopular due to the cost and inconvenience of travel and contributes to low morale among technicians.

“Because virtual scribes are location-agnostic, a scribe shortage in an understaffed office can be easily covered by a remote scribe without

asking a technician to travel,” Dr. Melamud adds. At once, you have a pool of backup scribes that can be deployed instantly when reinforcements are needed.

Patient care

PRISM-affiliated physicians have found that care delivery has remained unchanged by the use of virtual scribes. “Almost all examination findings can be communicated by the physician to the virtual scribe with ease,” Dr. Melamud notes. “Our physicians quickly realized that the patient care and flow was not disrupted—and in some instances, was enhanced—by having the in-the-room scribe removed.”

Staff experience

Surprisingly, the initial staff impression on the idea of a virtual scribe was “distinctly negative,” Dr. Melamud recalls. Staff were concerned they would be made obsolete, or key positions would be unfilled, while some physicians were fearful of not having a scribe physically present in the exam room. The fears were soon allayed, and anxieties eased.

After leveraging the proficiency and availability of virtual scribes, Dr. Melamud noted, “Our workforce is less stretched and as a result, the technicians who work in the office have more time to do patient-oriented tasks like screening, imaging, prepping for procedures, and interacting with patients. In-office staff feel valued for performing the important tasks that cannot be done virtually.”

‘The EMR required no updates and was loaded on the virtual scribe’s computer. Zoom allowed continued use of a familiar communication platform.’

Workforce availability and training

Immediately, PRISM saw a bolus of candidates interested in virtual scribe positions, including some former employees. “We had never seen so many applicants for a job position in a 48-hour period,” Nathalia Orbe, the new manager of virtual scribes at PRISM, recalls.

Remote health care work intuitively feels like a foregone conclusion. Suddenly, a work-from-home arrangement became a feasible option for many relocated or work-from-home preferred scribes. Many previously employed scribes who left the workforce for more-flexible jobs applied to return, raising the quality of applicants relative to the in-person scribe population.

Remote scribing also raised training efficiency and convenience, as a virtual scribe trainee (or trainees) could remotely shadow seasoned virtual scribes; a scribe in Florida can train a scribe in West Virginia.

Potential challenges

Like any worthy new initiative, a virtual scribe program has challenges, a learning curve, and chances for mistakes. Following are potential challenges of developing your own virtual scribe program based on PRISM's experience.

Virtual scribe proficiency

The true value of a virtual scribe program lies in the caliber of the scribe on the other end of the communication line. A virtual scribe program is only as strong as the quality of the individual virtual scribe.

Those developing a virtual-scribe program, or leasing a workforce from an external vendor, need to ensure the virtual scribes are highly trained in eye anatomy and disease states, and savvy in using the practice's EMR. The surest way to undercut the credibility and adoption of a virtual-scribe program is to rely on virtual scribes unable to seamlessly serve the physicians.

Initial physician discomfort

The physician-patient exam culture changes when there is no in-room scribe. "At the first encounter with virtual scribing, a physician may take some time to get used to communicating effectively with their scribe," Dr. Melamud explains. "Because the virtual scribe cannot see what the physician is examining, the physician needs to be explicit in dictating physical findings to ensure accurate documentation. This may cause some frustration in the beginning."

"But by the end of the first day, the process became so fluid that at times I would almost forget I had a virtual scribe," Dr. Melamud adds.

Broader physician adoption curve

While the virtual scribe program is popular among those who use it, most PRISM-affiliated retina physicians still use an in-person scribe. At first, physicians did not volunteer for a virtual scribe, especially if they'd had positive experiences with their in-person scribes. But on days when there are no physical scribes available, these practices and doctors are left with no choice but to reduce schedules or use a virtual scribe.

'By the end of the first day, the process became so fluid that at times I would almost forget I had a virtual scribe.'

—Alex Melamud, MD, MA

Broader physician adoption also can be hindered by technical difficulties, which can arise when relying on any cloud- and internet-based platform. While uncommon, regional disruptions to the cloud-based EMR and end-user Wi-Fi do occur—so it is imperative to develop a well-crafted and clearly communicated contingency plan for all parties.

On-site support

The use of virtual scribes still requires trained on-site technicians to serve as aides and "air traffic controllers" for patients and physicians. Without in-office technicians facilitating exam room setup and exam administration, physicians' efficiency will be impaired as they locate their own drugs, print their own follow-up letters, etc.

Future direction

As the adoption of a virtual scribe model at PRISM continues, there is little doubt among clinical leaders that the dynamic is here to stay. "The pros outweigh the cons," says Dr. Weichel, "and I don't see myself returning to an in-person scribe model."

PRISM did explore other scribe options, such as artificial intelligence (AI)-powered tools used by practitioners like Ramana

(Bob) Moorthy, MD, of Associated Vitreo-retinal and Uveitis Consultants in Indiana. AI tools, such as Microsoft's Nuance Dragon Ambient eXperience (DAX), sit atop the EMR and are trained over time to automatically update parts of the medical chart based on physician dictation.

Charts are typically completed by the end of the day as Nuance and practice personnel are on hand to review the transcription and ensure billing accuracy. While AI tools show promise and will be the topic of many forums and articles to come, PRISM ultimately decided to rely on their own virtual scribe program to address staffing needs.

As the PRISM program is in its relative infancy, a disciplined approach is needed to develop best-practice workflows, training programs, and appropriate management structures. Virtual scribes and physician users seem very satisfied with the program, and preliminary data shows that virtual scribes are retained longer than their in-person counterparts.

The number of proficient scribes in the cohort continues to increase, while the number of retina specialists interested in using a virtual scribe is trending up as well. As the program continues to develop, it will be paramount to measure physician and staff satisfaction, virtual-scribe turnover and retention statistics, the number of retina specialists regularly using a virtual scribe, and the number of adverse events (such as technical outages), among other key performance indicators.

Virtual scribes are not a magic bullet for health care service staffing woes, but they provide much-needed support and availability for physicians and patients. Questions remain about the viability of virtual scribes as a long-term staffing solution, both in PRISM and across the industry.

But increasingly, the question some PRISM-affiliated physicians seem to ask more than any other is, "When can I get one?"

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