

A SYSTEMS-BASED APPROACH TO PATIENT-CENTERED CARE



Proper counseling is essential to patients' adherence, but physicians' time is scarce.

BY PAULA ANNE NEWMAN-CASEY, MD, MS

With chronic conditions, including glaucoma, up to half of patients discontinue taking their prescribed medications within the first few months of starting therapy.¹ As ophthalmologists know well, poor medication adherence is a critical barrier to reducing the burden of vision loss from glaucoma. Currently, clinical practice lacks a strategic framework to address this issue.

A systems-based approach to comprehensive patient counseling has the potential to optimize patients' self-management skills and, thus, improve their treatment adherence. As the population ages and the prevalence of glaucoma increases, physicians' time will only become scarcer. A self-management support program that leverages technology and paraprofessional staff members could benefit patients and providers alike. Similar programs have been successfully implemented for diabetes care. This article describes the development of the Support, Educate, Empower (SEE) personalized glaucoma coaching program that aims to provide self-management support for glaucoma patients to improve their medication adherence.

AN IMPETUS FOR CHANGE

One day during my residency, the Veterans Affairs clinic in which I was working was completely backed up, and patients were spending around 4 hours in the waiting room. While seeing patient after patient, I came

upon a man whose glaucoma was clearly progressing. Although he denied having trouble with his drops, the Veterans Affairs records indicated that he had not gotten any of his medications refilled. When I noted this to the patient, the floodgates opened: He told me that his wife had died, he could no longer get his drops in, and he didn't feel like using them anyway. I was floored—this patient had been sitting in the clinic for 4 hours, yet there was no system in place to use that time to identify or counsel him on these issues.

The challenges with patient self-management of glaucoma are broad. Every patient is an individual with varying barriers to care, and there is no magic bullet to address poor adherence. Uniform, scripted approaches to improve patient adherence do not work. In reality, what patients need is for someone to pay

attention to them as individuals and to address their disease as it relates to their particular situations—but that is an expensive ask and one that physicians alone cannot fulfill. For me, this reality served as the impetus for the development of the SEE program.

THE SEE PROGRAM

The SEE program aims to leverage technology to support medical provider teams to deliver high-quality individualized education and counseling that would otherwise be available only through an extended conversation with a physician. Modeled after successful diabetes self-management programs (for which reimbursement is available), the SEE program is built on four concepts that are essential for behavioral change: (1) evidence-based interventions, (2) motivational interviewing, (3) tailored education, and (4) reminder systems.

AT A GLANCE

- ▶ Poor medication adherence is a critical barrier to reducing the burden of vision loss from glaucoma.
- ▶ A systems-based approach to comprehensive patient counseling has the potential to optimize patients' self-management skills and improve their treatment adherence.
- ▶ A self-management support program that leverages technology and paraprofessional staff members could benefit patients and providers.

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The need to provide evidence-based interventions speaks for itself. Motivational interviewing is a communication style in which the practitioner uses specific techniques such as asking open-ended questions and using reflective listening to help patients better identify their unique barriers and solutions to optimal disease self-management. With this approach, the practitioner supports the patient as the patient takes the lead in problem-solving. Although it is human nature to do the opposite of what an authority figure recommends, it is also human nature to persevere toward goals that we set for ourselves. Tailored education is almost like behavioral advertising in that the patient is made to feel like his or her educator is speaking to him or her in a personalized way, such as providing feedback on his or her individual barriers to care. Last, a reminder system that allows the patient to choose what types of alerts and reminders would be most helpful is key to his or her self-management.

HOW IT WORKS

The four concepts outlined above, alongside data from focus groups and surveys, were integrated into our prototype of the SEE program. We then honed the program using iterative beta-testing with glaucoma patients before testing its preliminary efficacy in a pilot study.

To use the platform, the SEE program glaucoma coach obtains

information on the patient from the electronic health record system. This includes the name of the patient's physician, prescribed glaucoma medications, visual field test results, optic nerve head photographs, prior laser or incisional surgeries, barriers to care, and personal details, such as whether he or she lives alone and whether he or she uses a cell phone. From there, all content that the SEE program generates is specific to the patient's disease and needs. Below is an overview of how the system works, based on the tenants of established self-management programs.

Motivational interviewing. The SEE program is designed to utilize paraprofessional staff members, such as ophthalmic technicians or health educators, as SEE program glaucoma coaches. Up front, these coaches participate in 2 days of training in glaucoma-specific motivational interviewing and use the SEE program eHealth tool to deliver individualized information and coaching to each patient. Using the platform, patients participate in a 1-hour initial coaching session, followed by two 30-minute coaching sessions scheduled 2 months apart. (In diabetes, insurance covers 10 hours of coaching in the first year and 2 hours every subsequent year, under the G0108 reimbursement code.) The SEE program eHealth tool embeds coaching prompts alongside the tailored educational content to ensure that the coaching meets evidence-based standards for effective behavioral counseling.

Between-visit support. Between sessions, the SEE program glaucoma coach follows up with patients monthly to provide them with an adherence metric to let them know how they are doing. The adherence metric is calculated using electronic adherence monitors. Using this parameter, the counselor can say, “Mrs. Jones, your adherence metric was 40% last month, and this month it is 50%—that's great. What are you doing differently?” Or, on the flip side, “I noticed your adherence metric was 50% last month and 40% this month. Tell me what's been going on in your life.”

These electronic adherence monitors are currently expensive, as they are used only in research; however, as the cost of sensors continues to decrease, the overall cost of the monitors will decrease as well. Moreover, as reimbursement shifts toward increasing incentives for health care providers to gather data demonstrating improved process outcomes, such as improved medication adherence, the cost of the monitors will decrease as the number of consumers increases.

Tailored education. The SEE program eHealth tool contains a comprehensive database of information about glaucoma developed over about 5 years and can make approximately 280 million different combinations of content. Thus, the content provided to each patient in these coaching sessions is highly personalized. For example, if a patient has pseudoexfoliation glaucoma, he or she would receive educational content only on that type of glaucoma.

Or, if the patient does not use a cell phone, he or she would receive information geared toward using an alarm clock for medication reminders.

Reminder system. The adherence monitors have a visual or audible alert system (AdhereTech) that is programmed to go off at the time patients specify that they take their medication doses. Depending on their preferences, 1 hour later, if the dose has not been taken, patients will receive a text message or an automated phone call reminding them to take their medication.

The in-person sessions and phone-based check-ins between sessions can help to solidify the relationship between the patient and the coach. This is the secret ingredient that provides crucial support and accountability to help the patient improve his or her medication-taking behavior and stick to it. Personalized messaging makes all of the information delivered truly ring a bell. Say a patient enjoys reading to his or her grandchildren. Because the SEE glaucoma coach has gotten to know the patient and the program prompts discussions to identify what motivates a patient to maintain his or her vision, the coach can help the patient draw the connection between missing doses of glaucoma medication and losing the ability to read to his or her grandchildren. It is essential to draw this type of connection for patients, but it is impossible to do so if we are unaware of their individual situations. That is why I am advocating for a personalized approach, in which the glaucoma coach has the time to get to know what motivates a patient to improve his or her disease self-management skills.

A TEAM-BASED APPROACH

With the SEE program, the counselor is not responsible for serving as the doctor, and the doctor can rest assured that all content delivered to his or her patient was developed by a physician. Yet, the doctor is not required to spend any time conducting these coaching

sessions. To close the loop, there are places in the SEE program online platform where the coach can take notes to remind him- or herself what information needs to be communicated to the physician through the electronic health record system. There is another place where the coach logs any questions the patient should ask his or her doctor at the next visit. At the end of the session, the coach prints out the list of questions for the patient to bring to his or her next appointment.

NEXT STEPS

We are currently finishing a pilot study of the SEE program to test its impact on medication adherence among nonadherent glaucoma patients. If successful, we will test the program in a randomized controlled trial to generate evidence to demonstrate to payers and insurance companies that reimbursing glaucoma coaching in a parallel way to diabetes self-management training would improve outcomes for glaucoma patients. If reimbursement is granted, we have an established SEE glaucoma coach training program and credentialing process in place and could deploy the platform fairly readily.

CONCLUSION

Despite evidence from randomized clinical trials that medication reduces vision loss from glaucoma, glaucoma

remains the second leading cause of blindness in the United States. A critical barrier to preventing vision loss is that about one-half of glaucoma patients are essentially untreated because they do not adhere to prescribed medical therapy. Even with surgery and implantable drug delivery devices, treatment success is dependent on the patients' ability to show up for their follow-up appointments and remain engaged in their care.

From an efficiency standpoint, physicians do not have the bandwidth to spend the full amount of time needed to educate and support patients throughout their glaucoma diagnosis and treatment. Faced with a growing prevalence of glaucoma as the US population ages and the concomitant projected shortages of ophthalmologists, developing systems-based approaches toward an improved model of patient-centered eye care becomes even more imperative. ■

1. Robin AL, Muir KW. Medication adherence in patients with ocular hypertension or glaucoma. *Exp Rev Ophthalmol*. 2019;14(4-5):199-210.

PAULA ANNE NEWMAN-CASEY, MD, MS

- Assistant Professor of Ophthalmology and Visual Sciences, Kellogg Eye Center, University of Michigan, Ann Arbor
- panewman@med.umich.edu
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