

Comanaging Patients with Diabetic Eye Disease

Good communication between ophthalmologists and diabetologists is key to maintaining patients' eye health.

AN INTERVIEW WITH TIMOTHY S. BAILEY, MD, FACE, CPI

With the rising prevalence of type 2 diabetes in the developed world in recent decades, effective and efficient collaboration among ophthalmologists, endocrinologists, and primary care providers in the care of patients with diabetes is more important than ever. For this issue of Retina Today focusing on diabetic macular edema, we sought the perspective of a noted endocrinologist regarding how to build and maintain relationships between the specialties. We know about the ophthalmic side of the equation, but what do diabetologists need from us? What should an ophthalmologist know to better serve his or her diabetic patients?



This interview with Timothy S. Bailey, MD, FACE, CPI, the Director and President of the Advanced Metabolic Care & Research Institute in Escondido, CA, and a Clinical Associate Professor of Medicine at the University of California at San Diego, provides insightful answers to these questions.

For our part, we know we need to keep our primary care and endocrine colleagues informed with letters about our patients' status, especially any changes. We know that we need to review with our diabetic patients the general guidelines for healthy lifestyle, including blood pressure and blood sugar control and aerobic exercise activity. We also know that, in return for these efforts, we would like our comanaging physicians to emphasize to these patients the need for their compliance with timely ophthalmic follow-up care. We want to be sure that we are all pulling in the same direction, trying to keep our physician colleagues up to date and making sure our patients know what they need to do to maintain their systemic and ocular health. The editors of Retina Today hope that getting this perspective from outside our profession will give us all some additional insights into how to achieve these goals.

— Allen C. Ho, MD
Chief Medical Editor

Retina Today: What avenues of communication do you use with ophthalmologists to make sure you are keeping up on your patients' status?

Dr. Bailey: Patients often don't know what to ask their ophthalmologists, so we send them home with a form to take to their appointment (Figure 1). The ophthalmologist can check off the appropriate choice and fill in a few words, and that gives us a better idea of the patient's retinopathy status.

We're in a heavily managed care market in the San

Diego area, so patients have to go where their insurance sends them, which can present challenges in obtaining data—not all ophthalmologists send routine notices to the endocrinologist about what they've found, nor do they even necessarily know that a patient has an endocrinologist. As a result, it can be a scramble to get the results from the ophthalmologist.

It would be helpful if ophthalmologists had something like the form in Figure 1 for their patients to take back to their doctor, whether he or she is the primary-care provider, internist, or endocrinologist.

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Express Retina Report

To:	Eye Specialist	Patient :	_____
Date:	____ / ____ / ____	Birthdate:	____ / ____ / ____

It is essential that we have the results of every patient's most recent dilated retinal examination on file. Please check off your findings and **ask the patient to return this form to our office** after the visit. Thank-you !

☐ **No Retinopathy**

☐ **Background Diabetic Retinopathy:** (describe) _____

☐ **Proliferative Diabetic Retinopathy:** (describe) _____

☐ **Other:** (describe) _____

Comments:

Figure 1. Retinal report form that is routinely distributed to patients prior to an eye exam.

Most patients with diabetes have multiple physicians. Although most are managed by a primary-care physician, many of them also intermittently or regularly see an endocrinologist for their care. Really, both the primary care physician and the specialist must have that eye and retinal data, not only for the information in and of itself, but for pay-for-performance standards.

RT: What information would you like to see ophthalmologists discuss with their patients?

Dr. Bailey: It would be wonderful if the ophthalmologist would discuss the extent of retinal disease more fully with the diabetes patient. I joke with patients that the ophthalmologist will tell you 1 of 3 things: If he says,

“It would be great if we had
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and other imaging, as is the case
with radiology.”

-Timothy S. Bailey,
MD, FACE, CPI

“Your eyes are so great, I wouldn’t have known you have diabetes,” that means they are in the clear. If he says, “You’re OK,” that means they probably have background retinopathy. If he says, “You need to schedule an appointment for further treatment,” then they most likely have proliferative retinopathy.

For the first 2 of those 3 levels, the ophthalmologist is probably not going to take action. If there is proliferative retinopathy, no eye doctor would fail to refer, and no patient would fail to notice the problem. Patients who fall into the middle category, however, are more difficult to manage because we have little information about their ophthalmic health. These patients may have background retinopathy, a couple of hemorrhages, and some hard exudates. Typically, these patients exhibit the early signs of diabetes but do not require any treatment outside of improved blood sugar control.

This would be a great opportunity for communication between the retinologist and the diabetologist or primary care provider. For patients who are relatively healthy with no retinopathy, it’s easy; we receive no note because there is nothing wrong. If there is pathology, there is plenty of communication; we get very detailed notes, and often fundus photos from the retinologist because he is doing procedures. And the patients in this category, who are going to the ophthalmologist monthly or more often, are often aware of their status. Once you put a needle into someone’s eyeball, they realize there is a problem.

There also lies an opportunity for better communication between the retina specialist and the patient. The message of blood sugar control can be reinforced at this stage. For example, a retina specialist might tell a patient, “You’ve got some damage going on in your eye, probably from your diabetes. You don’t need to have it lasered or have an injection in your eye, but you do have to control your blood sugar better.”

Not every patient with diabetes understands the seriousness of the disease because most people with moderately controlled diabetes have no symptoms. By the time neuropathy, retinopathy, and kidney failure

appear, however, there are fewer opportunities for patients to self-manage their disease. In the past we told patients that if they did not control their diabetes, blindness, limb loss, or kidney failure would result. Although we now have much better medications for patients to help control the disease, it is still important to educate patients on making necessary lifestyle changes as early as possible.

RT: How do you maintain good relationships with the ophthalmologists with whom you work most often? Do you meet with them?

Dr. Bailey: I don't think doctors really see each other anymore. Sometimes an ophthalmologist or other specialist will stop by my office to drop off a brochure, but most physicians are so busy seeing patients these days that we don't get out much. We may communicate via telephone, but the primary means of communication is through letters.

RT: Until a few years ago, the only option that ophthalmologists had for treating retinal complications of diabetes was laser. They now have other tools for addressing diabetic macular edema, including anti-VEGF injections, steroid injections, and steroid implants. Has this changed your working relationships or your end of the equation?

Dr. Bailey: Not at all. The results from the new therapies are much better, and these procedures are more effective than laser. Conceivably we could give intravitreal injections, but it would never enter our minds to do such a thing. There is no turf battle over those procedures. None of us wants to do injections.

RT: Do you look in the patient's eyes yourself?

Dr. Bailey: We have a standard ophthalmoscope and I can certainly identify cataracts, hemorrhages, and exudates. There are many studies, however, showing that screening for diabetes via ophthalmoscope by primary care physicians cannot replace screening by an eye care professional either in person or via telemedicine,¹⁻⁹ so I do not routinely check a patient's eyes unless he or she specifically mentions a change in vision. Even if I do check the patient's eyes, if there is a risk of ocular complications, I will refer the patient to an ophthalmologist for a comprehensive eye exam.

RT: Suppose an ophthalmologist sees a patient and there is a change in status. The patient goes from no

retinopathy to background retinopathy, or from background retinopathy to proliferative retinopathy. In an ideal world, what information would you want at that point?

Bailey: I think it's most important at this point that the treating ophthalmologist is sure to educate the patient regarding the available options.

When performing injections or other procedures, they typically send a note to the primary care physician for the patient's file, which is good, but it would be helpful if notes were sent to all the physicians involved in that patient's care such as the endocrinologist or cardiologist.

Whatever the reason for the treatment, the message to the patient should be similar, perhaps with a difference in the tone of severity depending on the patient's degree of disease control. Either, "You might go blind and you need to take better care of yourself," or "You're in the process of or at high risk for visual loss. You need to pay more attention to your diabetes or upgrade your therapy. What we're doing now is some therapy that will fix your immediate bleeding problems, but the most important thing you can do is control your diabetes, control your blood sugar. That is the most important thing that will preserve your vision." I'm not sure that all patients get that message.

Ophthalmologists should ask for the patient's A1C level, maybe on the referral sheet. That way when they look at the patient they can know: This patient has very high blood sugar, and that's why they have retinopathy.

RT: Are there any technologies that could make exchange of information easier?

Dr. Bailey: There's a lot of opportunity for collaboration, but currently, we have these "sophisticated" systems that don't necessarily have the capabilities to share information with different systems. More time is required in the exchange of information, increasing the pressure on our already-busy staff and schedules. It would be great if we had access to retinal photos and other imaging, as is the case with radiology. Radiologists set up portals so that we can look at x-rays with high resolution just by logging on to their system. I have not worked with an ophthalmologist who has such a system in place, and although the average primary care or internal medicine doctor may not be able to do much with these images, providing access to other specialties would be a step further in increasing the transparency across the continuum of care.

Increasingly, in other specialties, telemedicine is being used to provide more comprehensive care to patients, and I think there is great promise in ophthalmology. From a specialist perspective, being able to have an ophthalmologist look at a patient's eye at the point of care, either at my office or at a primary care office, would reduce the number of visits and the burden on the patient. If a problem was detected, the referral could immediately be initiated. Some of these high-tech gadgets have tremendous capability to help streamline the care of diabetes and even reduce the cost.

RT: If you could tell your counterparts in ophthalmology 1 thing that would help you to better care for patients you are comanaging, what would it be?

Dr. Bailey: The patient must understand his or her situation. Those 3 levels I mentioned need to be differentiated. The patients in the middle usually don't comprehend the potential severity of their situation. A more uniform approach to these patients is necessary to avoid confusion.

Technology can help to improve overall patient education, and it would be nice if all electronic medical records talked to each other, but until that happens, this form that we use is very helpful. This is the best way we're found to get data from ophthalmologists. If the patient refuses to leave the ophthalmologist's office without getting that form filled out, we have a 100% chance of getting the information we need. One of the ophthalmology offices we regularly work with has now copied our form for their own use. I see that as a positive sign. ■

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1. American Diabetes Association. Standards of medical care for patients with diabetes mellitus. *Diabetes Care*. 2000;23:S32-S42.

2. American Diabetes Association. Eye care guidelines for patients with diabetes mellitus. *Diabetes Care*. 1988;11:745-746.

3. Brechner R, Cowie C, Howie L, Herman W, Will J, Harris M. Ophthalmic examination among adults with diagnosed diabetes mellitus. *JAMA*. 1993;270:1714-1718.

4. Weiner JP, Parente ST, Garnick DW, Fowles J, Lawthers AG, Palmer RH. Variation in office-based quality. A claims-based profile of care provided to Medicare patients with diabetes. *JAMA*. 1995;273:1503-1508.

5. Peterson KA, Vinicor F. Strategies to improve diabetes care delivery. *J Fam Pract*. 1998;47:S55-S62.

6. Sussman E, Tsiaras W, Soper K. Diagnosis of diabetic eye disease. *JAMA*. 1982;247:3231-3234.

7. Bresnick GH, Mukamel DB, Dickinson JC, Cole DR. A screening approach to the surveillance of patients with diabetes for the presence of vision-threatening retinopathy. *Ophthalmology*. 2000;107:19-24.

8. Welch Allyn. Panoptic. Available at: <http://panoptic.welchallyn.com/index.html>; 2002.

9. Klein R, Klein B, Neider M, Hubbard L, Meuer S, Brothers R. Diabetic retinopathy as detected using ophthalmoscopy, a nonmydriatic camera and a standard fundus camera. *Ophthalmology*. 1985;92:485-491.