Did you know diabetes can cause serious eye problems?

- **Diabetic retinopathy (DR)** is a complication of diabetes that causes damage to the fine blood vessels of the retina.

- It is the **most common cause of irreversible blindness** in working-age Americans.

- DR **occurs in more than half** of people with diabetes. Many will not have symptoms until damage has occurred.

Stanford now offers testing using **Artificial Intelligence (AI)** to detect Diabetic Retinopathy.

**What is Diabetic Retinopathy testing?**
In DR testing, photographs are taken of patients’ retinas, where damage caused by diabetes can be visualized. At Stanford, an FDA-cleared artificial intelligence technology called IDx-DR is used to detect diabetes-related changes in these photographs, and to provide a recommendation to either see a retina specialist for an in-person exam, or to return in 1 year for another photo.

**How Long Does It Take?**
The entire exam can take about 10 minutes once you are seated at the machine.

**Indications for Use**
IDx-DR is intended for use by health care providers to automatically detect more than mild diabetic retinopathy in adults (22 years of age or older) diagnosed with diabetes who have not been previously diagnosed with diabetic retinopathy

**Warnings**
IDx-DR does not replace a full eye exam, but it will find diabetic retinopathy that needs to be seen by an eye doctor. While IDx-DR is reliable, it is not perfect. There is a chance it can miss disease or will think there is disease that isn’t there. Patients who have blurry vision or other symptoms of vision loss should see an eye doctor and can contact Stanford for a full appointment (see back).

**How Does It Work?**

**Image Capture**
A special camera is used to take pictures of the back of your eyes.

**Diagnostic Evaluation**
Pictures are processed by the AI software and analyzed for signs of DR.

**Results**
In less than a minute, results are provided, and you will be referred to an eye care provider if necessary.

The Byers Eye Institute serves as the center of the Stanford Teleophthalmology Autonomous Testing and Universal Screening (STATUS) program for remote diabetic eye care, a Bay Area-wide network of fundus cameras stationed at **Stanford-affiliated primary care and endocrinology clinics**. At these clinics, patients with diabetes can have photos of their retinas taken, and the images are interpreted by FDA-cleared Artificial Intelligence (AI) technology and, if needed, remotely by a retina specialist. You will then be notified if you need to be seen in-person by an eye doctor, or can be photographed again in a year.

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What if I test positive for diabetic retinopathy?

You will be referred to see a retina specialist at the Byers Eye Institute at Stanford.

The Stanford Diabetic Eye Care Team

Retina Specialists

Natalia Callaway, MD
Diana Do, MD
Theodore Leng, MD
Loh-Shan Leung, MD
Vinit Mahajan, MD, PhD
Darius Moshfeghi, MD
Prithvi Murthyunjaya, MD
Quan Dong Nguyen, MD
Carolyn Pan, MD
Steven Sanislo, MD
Stephen Smith, MD

Clinical Services Offered

• State-of-the-art therapies for DR
• Clinical trial access to next-generation treatments
• Advanced non-invasive imaging
• Retinal and vitreoretinal medical and surgical management
• Artificial intelligence-assisted diagnostics and prognosis

Why patients should come to the Byers Eye Institute: The world-class retina specialists at the Byers Eye Institute at Stanford use the latest diagnostic tools, cameras and retinal scanners to diagnose and monitor the progression of diabetic retinopathy in a state-of-the-art facility. They will also custom-tailor treatments for each patient to maximize visual outcomes by using the latest lasers, surgical systems, and medicines to address diabetic changes that can lead to vision loss.

What if I test negative for diabetic retinopathy?

A negative result means you do not have a level of DR that needs in-person evaluation and can be retested in 12 months.

What if the image taken was deemed to have insufficient quality?

In these cases, you will be referred for an in-person exam at the Byers Eye Institute to determine if you have DR, and/or if another condition, such as a cataract, is causing the reduced image quality, and if any treatment is recommended.

What if I have blurry vision or other vision-related symptoms?

If you have blurred vision or any other symptoms of vision loss, you need to see an eye care specialist. Call for a patient appointment using the number below. If you have an existing eye condition, you should continue to see an eye specialist for that condition. DR testing does not take the place of a complete eye exam.

For Patient Appointments:
Please mention “Diabetic Eye Exam”
2452 Watson Court, Palo Alto, CA 94303
Tel: 650.723.6995 • Fax: 650.725.6619
ophthalmology.stanford.edu
stanfordhealthcare.org/eyeinstitute

Refer a Patient: