



**September
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Newsletter**

Daily Monitoring System for Low-Vision Eyes Using Mobile Devices

Your smart phone has become your doctor's assistant. Healthcare providers, as well as biotech companies, are continually developing new ways to integrate monitoring and reporting health status while avoiding office visits to your doctor.

Do you have diabetes or high blood pressure? Patients have been using health improvement devices such as glucometers, spirometers, diet trackers and heart rate monitors for years. In some cases, these machines 'report' results directly to the physician's office.

Currently, most people monitor the progression of their AMD through office visits to their ophthalmologists who examine the retina. The *ForeSee* Home Monitor, featured in our July 2017 update, offers patients the opportunity to test their vision at home. Doctors can review test results and are notified if a change in vision occurs.

MyVisionTrack (mVT) is a simple-to-use smart phone app that operates in the same fashion. It was developed by researchers and clinicians at the Retina Foundation of the Southwest in Dallas. In a 4-month clinical trial involving 160 seniors (median age 77.5), more than three quarters of the participants were able to perform a daily vision test

using the device, and close to 99% of study subjects complied with at least weekly testing.

Once the app is opened, the user can play a game and test visual acuity at the same time. Three or four circles are displayed: one distorted and the rest normal. The user taps the distorted circle in order to move to the next step. Each following stage shows similar visual stimuli but with each level, the distorted circle is less obvious. The app determines the lowest detection level that the eyes can pick up. The results are then saved in a cloud bank for review by your eye doctor.

This app was created in order to promote regular vision self-screening by patients, however your doctor must make the effort to log in, download the data and review the results. Since there are many other vision games and home monitoring programs in development, eye doctors have expressed concern that patients will start using vision assessment programs and just assume their doctor will have access to the records.

If you are interested in learning more about a system that will allow you to monitor your AMD at home, talk to your doctor about which of the available programs he or she recommends.

To read more visit myVisionTrack.com.

To review the results of the clinical trial involving the mVT, read: Kaiser, P K, et al, *Feasibility of a Novel Remote Daily Monitoring System for Age-Related Macular Degeneration Using Mobile Handheld Devices: Results of a Pilot Study*, *Retina*, 33:1863-1870, 2013.