

Foveal Threshold Exam

Your Comprehensive Guide

[Foveal Threshold Exam Overview](#)

The Foveal Threshold Exam at a Glance

List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam

Billing and Coding for Foveal Threshold Exam

Start Conducting Foveal Threshold Exam with Carrot

The foveal region of the macula is responsible for the sharpest central vision, and it's here that conditions like diabetic retinopathy and macular degeneration first cause damage. You'll need a highly sensitive, specialized test that provides detailed insights to slow disease progression in this part of the eye. The foveal threshold exam can help you intervene early and provide more targeted treatment to patients needing care.

The foveal threshold exam focuses on this small but crucial part of the retina. When conducted with Carrot, the foveal threshold exam becomes more efficient, accurate, and easier to interpret. You can now offer your patients a smoother and more comfortable testing experience and collect all the data needed to make informed treatment decisions.

Foveal Threshold Exam Overview

The foveal threshold exam measures the sensitivity of the central visual field, specifically within the foveal area, and covers a radius of about 10-15 degrees. It helps detect early changes in visual function in the macula and surrounding retina, which is critical for tasks like reading and recognizing faces. These insights make the test especially useful for identifying conditions such as age-related macular degeneration (AMD), diabetic maculopathy or retinopathy, and other retinal conditions. With this level of sensitivity, you can differentiate between different types of visual field defects, like paracentral or ring scotomas versus central scotomas.

Carrot streamlines the exam with real-time analysis, immediate reporting, condition monitoring, and a patient-friendly physical form factor. These features help mitigate patient fatigue and improve accessibility, which is especially important for older patients or those with [disabilities](#).

[Foveal Threshold Exam Overview](#)

The Foveal Threshold Exam at a Glance

List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam

Billing and Coding for Foveal Threshold Exam

Start Conducting Foveal Threshold Exam with Carrot

Academic references and clinical validation



The foveal threshold can be compared with the patient's visual acuity to detect early damage. **Research shows** this measurement can also provide a **reliable estimate** of best-corrected visual acuity.



This study supports using the foveal threshold exam for measuring central vision in advanced glaucoma. This measurement is closely connected to vision clarity, central vision sensitivity, and blood flow in the eye, so foveal threshold testing may help track the progression of glaucoma.



This study shows that the foveal threshold exam can help predict vision improvement after treatment for age-related macular degeneration. Researchers found that patients with a higher foveal threshold and healthier photoreceptors before treatment were more likely to have better vision after 12 months of intravitreal aflibercept therapy.

30 days free.
No strings attached.

We are confident you'll love Carrot just like the 2,400+ doctors who have already made the switch.

[Start your 30-day trial](#)



Foveal Threshold Exam Overview

[The Foveal Threshold Exam at a Glance](#)

List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam

Billing and Coding for Foveal Threshold Exam

Start Conducting Foveal Threshold Exam with Carrot

The Foveal Threshold Exam at a Glance

One of the foveal threshold exam’s main strengths is its ability to detect early signs of vision loss. This capability gives you time to intervene before it affects the patient’s daily activities like reading, driving, and recognizing faces. But because it focuses primarily on the central field of vision, the foveal threshold exam may miss peripheral defects and overlook common conditions like glaucoma. This test is relatively fast to conduct, so adding it to your routine macular degeneration screenings means more comprehensive patient care without straining your workflows and exam schedule timelines.

Pros and Cons of the Foveal Threshold Test

We know the foveal threshold exam is efficient, useful, and widely used, but there are pros and cons to incorporating this test into your routine.

PROS	CONS
The foveal threshold exam is highly sensitive and suited for detecting early stages of disease.	The foveal threshold exam focuses exclusively on central vision, so it does not detect most peripheral defects.
A precise focus on the central 10-15 degrees of vision gives the clearest picture of foveal function compared to other exams.	Patients at risk of glaucoma and those who show signs of peripheral vision loss will need additional testing.
The foveal threshold exam helps track progressive conditions like macular degeneration and diabetic retinopathy, which are extremely common.	When using traditional methods, patients may need to wear an eye patch. This experience can increase anxiety or interfere with test results.
This test is one of the shorter visual exams, so patient fatigue is usually low.	This test can be challenging for patients as they try to detect low-decibel stimuli.

Foveal Threshold Exam Overview

The Foveal Threshold Exam at a Glance

[List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam](#)

Billing and Coding for Foveal Threshold Exam

Start Conducting Foveal Threshold Exam with Carrot

List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam

Age-Related Macular Degeneration (AMD)	<p>Almost 20 million Americans age 40 and over have AMD. The foveal threshold exam detects early visual function decline in the macula and helps you diagnose AMD, preserving more vision.</p>
Diabetic Retinopathy	<p>One in ten Americans has diabetes, and 26% of them experience diabetic retinopathy. Diabetic retinopathy can cause subtle macular changes that the foveal threshold test can identify early. Recognizing these changes allows for timely management and helps prevent further vision loss in people with diabetes.</p>
Macular Edema	<p>Another condition often linked to diabetes, macular edema, can lead to a decrease in foveal sensitivity. The foveal threshold test helps monitor the extent of edema and its impact on central vision.</p>
Macular Hole	<p>A macular hole can cause defects in central vision. The foveal threshold exam is highly sensitive in detecting the early stages of macular hole development and helps support more prompt intervention.</p>
Other Conditions	<p>The foveal threshold exam can also monitor: Retinal vein occlusion • Retinal dystrophies • Optic neuropathy</p>

Foveal Threshold Exam Overview

The Foveal Threshold Exam at a Glance

List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam

[Billing and Coding for Foveal Threshold Exam](#)

Start Conducting Foveal Threshold Exam with Carrot

Billing and Coding for Foveal Threshold Exam

Typically, the foveal threshold exam is billable under CPT code 92083, which is reserved for a comprehensive, extended visual field exam with quantitative testing.

The [Medical Physician Fee Schedule \(MPFS\)](#) currently indicates reimbursement between \$25 and \$80. This range is wide because factors such as practice location, setting, and modifiers can impact fees.

When is the foveal threshold exam required?

This exam can be incorporated into routine, comprehensive visual field assessments — especially for patients at risk of macular degeneration, diabetic retinopathy, or macular edema. It should be high on your list of screenings when a patient reports difficulty with tasks that require sharp central vision, like reading or driving. This test can also be helpful for patients with a family history of macular diseases or those taking [medications that affect the retina](#).

This test should also be conducted regularly for patients with known macular conditions to assess and adjust treatment plans.

Is the foveal threshold test required for driver's licenses?

The foveal threshold exam isn't required for driver's licenses, and its test results have limited usefulness for driving performance. That said, patients with conditions affecting their central vision should be carefully monitored, as these conditions can impair their ability to drive safely. Patients with macular degeneration or a sudden change in central vision may struggle to read road signs or notice obstacles, and [visual testing may be required](#).

Foveal Threshold Exam Overview

The Foveal Threshold Exam at a Glance

List of Ocular Diseases Monitored and Diagnoses Identified by the Foveal Threshold Exam

Billing and Coding for Foveal Threshold Exam

[Start Conducting Foveal Threshold Exam with Carrot](#)

Start Conducting Foveal Threshold Exams with Carrot

The foveal threshold exam is designed to precisely measure central vision sensitivity, focusing strongly on the fovea and surrounding macula. For patients at risk of AMD or those with diabetes, the foveal threshold exam should be part of their routine screenings.

With Carrot's efficient, intuitive interface, collecting the data you need to make informed treatment decisions and monitor subtle changes is easy. And since Carrot's headsets were designed to improve the patient experience and overcome accessibility barriers, you can offer comprehensive testing to more of your patients who need it.

Ready to get started?

Schedule a demo or begin your 30-day free trial of Carrot to offer an exceptional eye exam experience in your practice.

[Book a demo](#)

[Start your 30-day trial](#)



Questions? Contact sales@carrot.io talk to a Carrot expert today.