Medical Coverage Policy | Scanning
Computerized Ophthalmic Diagnostic Imaging

EFFECTIVE DATE: 03|01|2026
POLICY LAST REVIEWED: 06|03|2026

OVERVIEW

Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) is a non-invasive, non-contact imaging technique. SCODI produces high resolution, cross-sectional tomographic images of ocular structures and is used for the evaluation of anterior segment and posterior segment disease.

Posterior segment SCODI allows for earlier detection of optic nerve and retinal nerve fiber layer pathologic changes before there is visual field loss. When appropriately used in the management of the glaucoma patient or glaucoma suspect, therapy can be initiated before there is irreversible loss of vision. This imaging technology provides the capability to discriminate among patients with normal intraocular pressures who have glaucoma, patients with elevated intraocular pressure who have glaucoma, and patients with elevated intraocular pressure who do not have glaucoma. SCODI also permits high resolution assessment of the retinal and choroidal layers, the presence of thickening associated with retinal edema, and of macular thickness measurement. Vitreo-retinal and vitreo-papillary relationships are displayed permitting surgical planning and assessment.

This medical policy addresses the evaluation of posterior segment disease. Refer to the Related Policies section for the evaluation of anterior segment disease.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage Plans and Commercial Products

Posterior Segment optical coherence tomography (OCT) is considered to be reasonable and necessary to:

- Diagnose and manage medically and surgically retinal and neuro-ophthalmic diseases which involve changes in the optic nerve, subretinal and intraretinal changes, vitreo-retinal relationships and changes in the nerve fiber layer.
- Diagnose early glaucoma and monitor glaucoma treatment
- Differentiate causes of other optic nerve disorders when a diagnosis is in doubt.
- Diagnose and manage the patient's condition when visual field results are insufficient; or when reliable visual field testing cannot be performed, due to visual, physical, mental, or age constraints.
- Differentiate when a discrepancy exists between the clinical appearance of the optic nerve and the visual fields
- Detect further loss of optic nerve or retinal nerve fiber layer changes in the presence of advanced optic nerve damage and advanced visual field loss
- Follow glaucoma suspects.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable diagnostic testing and not medically necessary benefits/coverage.

BACKGROUND

Glaucoma

Glaucoma is a leading cause of blindness, and a disease for which treatment methods clearly are available and in common use. Scanning computerized ophthalmic diagnostic imaging (SCODI) allows for early detection of glaucomatous damage to the nerve fiber layer or optic nerve of the eye. It is the goal of these diagnostic imaging tests to discriminate among patients with normal intraocular pressure (IOP) who have glaucoma, patients with elevated IOP who have glaucoma, and patients with elevated IOP who do not have glaucoma. These tests can also provide precise methods of observation of the optic nerve head and can more accurately reveal subtle glaucomatous changes over the course of follow-up exams than visual field and/or disc photos. This can allow earlier and more efficient treatment of the disease process. The severity of glaucoma damage can be estimated as mild, moderate, severe or indeterminate.

Retinal Disorders

Retinal disorders are the most common causes of severe and permanent vision loss. SCODI is a valuable tool for the evaluation and treatment of patients with retinal disease, especially macular abnormalities. SCODI is able to detail the microscopic anatomy of the retina and the vitreo-retinal interface. SCODI is useful to measure the effectiveness of therapy, in determining the need for ongoing therapy, or cessation of therapy.

The retina is a complex tissue in the back of the eye that contains specialized photoreceptor cells called rods and cones. The photoreceptors connect to a network of nerve cells for the local processing of visual information. This information is sent to the brain for decoding into a visual image. The adjacent retinal pigment epithelium (RPE) supports many of the retina's metabolic functions.

The retina is susceptible to a variety of diseases, including age-related macular degeneration (AMD), diabetic retinopathy (DR), retinitis pigmentosa (RP) and other inherited retinal degenerations, uveitis, retinal detachment, and eye cancers. Each of these can lead to visual loss or complete blindness.

The leading cause of visual loss among elderly persons is AMD, which has an increasingly important social and economic impact in the United States. As the size of the elderly population increases in this country, AMD will become a more prevalent cause of blindness than both DR and glaucoma combined.

DR is also a major cause of blindness. In the proliferative stage of the disease, newly formed, abnormal blood vessels can break through the retinal surface and hemorrhage into the normally transparent, gelatin-like vitreous in the middle of the eye. Scar tissue may subsequently form and pull the retina away from the back of the eye, causing a retinal detachment to occur.

Rare inherited retinal degenerations, typified by RP, result in the destruction of photoreceptor cells and the RPE.

Clinical evidence has shown that long-term use of chloroquine (CQ) and/or hydroxychloroquine (HCQ) can lead to irreversible retinal toxicity. SCODI may be indicated to provide monitoring of patients for the development of retinopathy during long-term therapy.

Posterior Segment SCODI

Posterior segment SCODI allows for earlier detection of optic nerve and retinal nerve fiber layer pathologic changes before there is visual field loss. When appropriately used in the management of the glaucoma patient or glaucoma suspect, therapy can be initiated before there is irreversible loss of vision. This imaging technology provides the capability to discriminate among patients with normal intraocular pressures who have glaucoma, patients with elevated intraocular pressure who have glaucoma, and patients with elevated intraocular pressure who do not have glaucoma. SCODI also permits high resolution assessment of the retinal and choroidal layers, the presence of thickening associated with retinal edema, and of macular thickness measurement. Vitreo-retinal and vitreo-papillary relationships are displayed permitting surgical planning and assessment. The evidence is sufficient to determine the effects of the technology on health outcomes.

CODING

Medicare Advantage Plans and Commercial Products

The following CPT code(s) are medically necessary when filed with one of the ICD-10 diagnosis codes for the applicable CPT codes in the attachment below:

92133 Computerized ophthalmic diagnostic imaging (eg, optical coherence tomography [OCT]), posterior segment, with interpretation and report, unilateral or bilateral; optic nerve

92134 Computerized ophthalmic diagnostic imaging (eg, optical coherence tomography [OCT]), posterior segment, with interpretation and report, unilateral or bilateral; retina

92137 Computerized ophthalmic diagnostic imaging (eg, optical coherence tomography [OCT]), posterior segment, with interpretation and report, unilateral or bilateral; retina, including OCT angiography

Please follow correct coding guidelines regarding filing for the global service, or professional/technical component.

ICD-10 Diagnosis Codes

*****Please note there are separate ICD-10 diagnosis lists in separate tabs for each CPT code, above.

RELATED POLICIES

Measurement of Ocular Blood Flow for Glaucoma
Medicare Advantage Plans National and Local Coverage Determinations Policy
Optical Coherence Tomography of the Anterior Eye Segment

PUBLISHED

Provider Update, January/August 2026
Provider Update, May 2025
Provider Update, April 2024
Provider Update, May 2023
Provider Update, August 2022

REFERENCES

1. Centers for Medicare and Medicaid Services. Local Coverage Determination (LCD): Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) (L34380)
2. Centers for Medicare and Medicaid Services. Local Coverage Article: Billing and Coding: Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) (A56537)
3. Centers for Medicare and Medicaid Services. Local Coverage Article: Billing and Coding: Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) (L33751)

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