Scanning Computerized Ophthalmic Diagnostic Imaging (92135)

Scanning computerized ophthalmic diagnostic imaging allows for early detection of glaucoma 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 pressures (IOP) who have glaucoma, patients with elevated IOP who have glaucoma, and patients with elevated IOP who do not have glaucoma.

Two forms of scanning computerized ophthalmic diagnostic imaging tests that currently exist are confocal laser scanning ophthalmoscopy (topography) and scanning laser polarimetry. Although these techniques are different, their objective is the same.

Confocal scanning laser ophthalmoscopy (topography) uses 32 tomographic images to make quantitative topographic measurements of the optic nerve head and surrounding retina.

Scanning laser polarimetry measures change in the linear polarization of light (retardation). It uses a polarimeter, an optical device to measure linear polarization change and a scanning laser ophthalmoscope together to measure the thickness of the nerve fiber layer of the retina.

Indications and Limitations of Coverage and/or Medical Necessity

Scanning computerized ophthalmic diagnostic imaging allows earlier detection of glaucoma and more sophisticated analysis for ongoing management. These tests can distinguish patients with glaucomatous damage irrespective of the status of the IOP. These tests also provide more 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 can, thus allowing for earlier and more efficient efforts of treatment toward the disease process.

Medicare of Florida will consider scanning computerized ophthalmic diagnostic imaging medically reasonable and necessary under the following circumstances:

1. The patient presents with “mild” glaucomatous damage or “suspect glaucoma” as demonstrated by any of the following:
   - Intraocular pressure ≥ 22mmHg as measured by applanation
   - Symmetric or vertically elongated cup enlargement, neural rim intact, cup/disc ratio > 0.4
   - Focal optic disc notch
   - Optic disc hemorrhage or history of optic disc hemorrhage
   - Nasal step peripheral to 20 degrees or small paracentral or arcuate scotoma
   - Mild constriction of visual field isopters

   Note: Because of the slow disease progression of patients with “suspect glaucoma” or those with “mild” glaucomatous damage, the use of scanning computerized ophthalmic diagnostic imaging at a frequency of > 1/year is not expected.

2. The patient presents with “moderate” glaucomatous damage as demonstrated by any of the following:
   - Enlarged optic cup with neural rim remaining but sloped or pale, cup to disc ratio > 0.5 but < 0.8
- Definite focal notch with thinning of the neural rim
- Definite glaucomatous visual field defect (e.g., arcuate defect, nasal step, paracentral scotoma, or general depression.

Note: Patients with "moderate damage" may be followed with scanning computerized ophthalmic diagnostic imaging and/or visual fields. One or two tests of either per year may be appropriate. If both scanning computerized ophthalmic diagnostic imaging and visual field tests are used, only one of each test would be considered medically necessary, as these tests provide duplicative information.

Scanning computerized ophthalmic diagnostic imaging is not considered medically reasonable and necessary for patients with "advanced" glaucomatous damage. Instead, visual field testing should be performed. (Late in the course of glaucoma, when the nerve fiber layer has been extensively damaged, visual fields are more likely to detect small changes than are changes in scanning computerized ophthalmic diagnostic imaging).

The patient with "advanced" glaucomatous damage would demonstrate any of the following:
- Diffuse enlargement of optic nerve cup, with cup to disc ratio > 0.8
- Wipe-out of all or a portion of the neural retinal rim
- Severe generalized constriction of isopters (i.e., Goldmann I4e, < 10 degrees of fixation)
- Absolute visual field defects to within 10 degrees of fixation
- Severe generalized reduction of retinal sensitivity
- Loss of central visual acuity, with temporal island remaining

In addition, scanning computerized ophthalmic diagnostic imaging is not considered medically reasonable and necessary when performed to provide additional confirmatory information regarding a diagnosis, which has already been determined.

HCPCS Codes

92135  Scanning computerized ophthalmic diagnostic imaging (e.g., scanning laser) with interpretation and report, unilateral
ICD-9 Codes that Support Medical Necessity

- 362.85 Retinal nerve fiber bundle defects
- 364.22 Glaucomatocyclitic crises
- 364.53 Pigmentary iris degeneration
- 364.73 Goniosynechiae
- 364.74 Adhesions and disruptions of pupillary membranes
- 364.77 Recession of chamber angle
- 365.00-365.04 Borderline glaucoma [glaucoma suspect]
- 365.10-365.15 Open-angle glaucoma
- 365.20-365.24 Primary angle-closure glaucoma
- 365.31-365.32 Corticosteroid-induced glaucoma
- 365.41-365.44 Glaucoma associated with congenital anomalies, dystrophies, and systemic syndromes
- 365.51-365.59 Glaucoma associated with disorders of the lens
- 365.60-365.65 Glaucoma associated with other ocular disorders
- 365.81-365.89 Other specified forms of glaucoma
- 365.9 Unspecified glaucoma
- 368.40 Visual field defect, unspecified
- 368.41 Scotoma involving central area
- 368.42 Scotoma of blind spot area
- 368.43 Sector or arcuate defects
- 368.44 Other localized visual field defect
- 368.45 Generalized contraction or constriction
- 377.00-377.04 Papilledema
- 377.9 Unspecified disorder of optic nerve and visual pathways
- 743.20-743.22 Buphthalmos

Reasons for Denial

When performed for indications other than those listed in the “Indications and Limitations of Coverage and/or Medical Necessity” section of this policy.

Scanning computerized ophthalmic diagnostic imaging does not have case controlled studies which demonstrate a defined role in making clinical treatment decisions regarding diseases other than those listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy. Until this technology is proven to be as specific and sensitive a method for following other diseases as existing tests, it should not supersede current technologies (e.g., fluorescein angiography).

Scanning computerized ophthalmic diagnostic imaging is not medically necessary when performed solely to provide additional confirmatory information regarding a diagnosis that has already been determined.

Coding Guidelines

HCPCS code 92135 is considered a unilateral service. The provider should indicate which eye was treated with either a LT or RT modifier on the CMS-1500 claim form.
Documentation Requirements

Medical record documentation (e.g., office/progress notes) maintained by the performing physician must indicate the medical necessity of the scanning computerized ophthalmic diagnostic imaging. Additionally, a copy of the test results, computer analysis of the data, and appropriate data storage for future comparison in follow-up exams is required. If both eyes are treated, the documentation maintained by the provider must demonstrate medical need for the performance of the test for each eye.

Other Comments

In the United States, glaucoma is the second leading cause of blindness and the most frequent cause among African-Americans. The management of glaucoma includes the early detection and treatment to be able to arrest the loss of vision. Detection depends on the ability to recognize the early clinical manifestations of the various glaucomas.

Glaucoma is not a single disease process. Rather, it is a large group of disorders that are characterized by widely diverse clinical and histopathological manifestations. The common denominator of all the glaucomas is a characteristic optic neuropathy, which derives from various risk factors including increased intraocular pressure (IOP). Although elevated IOP is clearly the most frequent causative risk factor for glaucomatous optic atrophy, attempts to define glaucoma on the basis of ocular tension are no longer advised.

Almost 50 percent of patients with glaucoma remain undetected. Thirty percent of glaucoma patients are those with normal IOP. Furthermore, there are patients with elevated IOP that do not necessarily have glaucoma.

Dependence upon visual field tests to separate those patients with glaucoma from those without the disease would still miss a large number of patients. This is because as many as 50 percent of the one million ganglion cells that enter each optic nerve must be lost before there is glaucomatous visual field defect created. Additionally, some patients cannot perform visual field testing reliably, as it is a subjective test requiring a certain level of alertness and cooperation.

Advance Notice Statement

Advance Beneficiary Notice (ABN) is required in the event the service may be denied or reduced for reasons of medical necessity.

Ophthalmoscopy (92225 and 92226)

Extended ophthalmoscopy is the inspection of the interior of the eye with the pupil dilated. This inspection is fundamental to diagnosis and permits visualization of the optic disk, arteries, veins, retina, choroid, and media and is directed toward the condition of the vessels, the color of the tissue and the character of the optic nerve. The three methods of viewing the ocular fundus include direct ophthalmoscopy, by which a magnification of about 15X is obtained; indirect ophthalmoscopy, by which a larger field is obtained, but with magnification of two to three X; and biomicroscopy combined with a lens to neutralize corneal refracting power.