

Policy #: 084

Original policy date: 01/01/08
Revised date: 10/6/09

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Title

Anterior Eye Segment Optical Imaging

Description

Glaucoma, a leading cause of blindness, is a condition characterized by destruction of the fibers of the retinal nerve, which convert light into nerve impulses that are interpreted by the brain as vision. In most cases, glaucoma is associated with elevated pressure within the eye (intraocular pressure). The most common form of glaucoma, known as open-angle glaucoma, is a slowly progressive, painless disease that frequently results in increasing loss of peripheral vision. A less common form of glaucoma, known as acute angle-closure glaucoma, occurs rapidly and is usually caused by a sudden blockage of the structures that allow fluid in the front (anterior) chamber of the eye to drain. The most frequent cause of this sudden blockage is the closure of the angle (or space) between the back of the cornea and the front of the iris, which is where the trabecular network (the structure that allows the fluid to drain), is located. When the drainage of fluid is abruptly blocked, the intraocular pressure rises rapidly and can quickly destroy the retinal nerve if not relieved promptly. This is a medical emergency, is usually associated with severe pain and redness of the eye, and must be treated within a few hours in order to avoid permanent loss of vision.

Patients with narrow angles are at greater risk for acute angle-closure glaucoma. The acute closure of the angle is precipitated by dilation of the pupil, which can occur with certain medications, moving into darkness, and other causes. Knowing that a patient has a narrow angle would lead to the avoidance of medications that dilate the pupil, and in some instances, might indicate a need for chronic eye drops to keep the pupil constricted.

The traditional method for measuring the angle between the cornea and the iris is known as gonioscopy. An eye care professional places a special contact lens with mirrors on the cornea of the patient's eye and views the angle through a slit lamp or an ophthalmoscope. Recently, the FDA has approved several devices that use a technology known as optical coherence tomography (OCT) to measure the angle. OCT is similar to ultrasound, but uses light waves rather than sound waves to create the image of the angle.

Anterior eye segment optical imaging is used to obtain high-resolution images and measurements of the anterior segment ocular structures (cornea, anterior chamber, iris and the central portion of the lens) including the angle.

It is designed to image the shape, size and position of anterior components and make precise measurements of the distances between them, including angle-to-angle, angle size in degrees, pupil diameter, anterior chamber depth, and thickness and radii of curvature of the crystalline lens. The anterior segment is measured pre and post operatively for laser surgery in refractive surgeries.

There currently are no reliable studies that indicate that the use of OCT to measure the angle results in improved health outcomes in the form of lower incidence of acute angle-closure glaucoma.

When services are not covered for commercial products (excluding Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx)

We do not cover **anterior eye segment optical imaging**¹, because it is considered investigational as it does not meet our Medical Technology Assessment Guidelines, #350.

When services are covered for Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx

We cover **anterior eye segment optical imaging** for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx products, in accordance with local Medicare guidelines for the following indications:² To evaluate narrow angle, suspected narrow angle, mixed narrow and open angle glaucoma, and angle recession as all determined by gonioscopy

- To determine the proper intraocular lens for a patient who has had prior refractive surgery and now requires cataract extraction
- To evaluate iris tumor
- To evaluate corneal edema or opacity that precludes visualization or study of the anterior chamber
- To calculate lens power for cataract patients who have undergone prior refractive surgery (Reimbursement will only be made for the cataract codes as long as additional documentation is available in the patient record of the prior refractive procedure. Reimbursement will not be made in addition to A-scan or IOL master.)
- To evaluate and plan treatment for patients with diseases affecting the cornea, iris, lens and other anterior segment structures
- To provide additional information during the planning and follow-up for corneal, iris, cataract, glaucoma and other anterior segment surgeries.

NOTE: Coverage of anterior eye segment optical imaging for Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PlusRx products, *effective 12/5/08*.

NOTE: For diagnoses that are considered medically necessary for Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx products, see footnote 2.

When services are not covered for Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx

We **do not cover anterior segment optical imaging** for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx products for conditions not listed above.²

We **do not cover anterior segment optical imaging for screening** for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx products in accordance with local Medicare guidelines.²

Individual consideration

All our medical policies are written for the majority of people with a given condition. Each policy is based on medical science. For many of our medical policies, each individual's unique clinical circumstances may be considered in light of current scientific literature. For consideration of an individual patient, physicians may send relevant clinical information to:

For services already billed

Blue Cross Blue Shield of Massachusetts
Provider Appeals
PO Box 986065
Boston, MA 02298

Prior to performance of service

Blue Cross Blue Shield of Massachusetts
Case Creation/Medical Policy
One Enterprise Drive
Quincy, MA 02171
Tel: 1-800-327-6716
Fax: 1-888-641-5330

Authorization Information

For Managed Care members:

- No authorization is required for this service for Medicare HMO members; *see Managed Care Guidelines for additional requirements.*
- This service is not covered for non Medicare HMO members.

For Indemnity and PPO members:

- No authorization is required for Medicare PPO members; *see Indemnity and PPO Guidelines for additional requirements.*
- This service is not covered for BCBSMA non Medicare PPO or Indemnity members.

Managed Care Guidelines

All authorization requirements are determined by the individual's subscriber certificate, explanation of coverage, or summary plan description, however;

- **For Medicare HMO Blue members:** The service must meet the criteria for coverage noted in this policy, be medically necessary, prescribed by a plan physician and provided by a network provider.
- **For Medicare HMO Blue members:** Referrals are required for all visits to a specialist.
- For all other Managed Care plans, any specialist visit requires a referral, except for visits performed by OB/GYN specialists.
- Authorization is required for an inpatient admission.

Indemnity and PPO Guidelines

All authorization requirements are determined by the individual's subscriber certificate, explanation of coverage, or summary plan description, however;

- Authorization is required for an inpatient admission.
- Authorizations are not required for most outpatient services as determined by the individual's subscriber certificate.
- Referrals to a specialist are not required.

Coding information

Procedure codes are from current CPT, HCPCS Level II, Revenue Code, and/or ICD-9-CM manuals, as recommended by the American Medical Association, Centers for Medicare and Medicaid Services and American Hospital Associations. Blue Cross Blue Shield Association national codes may be developed when appropriate.

The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Anterior Eye Segment Optical Imaging:

The following procedure will reject **for Commercial Products only**, as non-covered leaving **no** patient balance; as this procedure does not meet our Medical Technology Assessment Guidelines (#350).

However, in accordance with CMS guidelines, the following procedure is covered **for our Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS products, only, effective 12/5/08.**

- CPT Category III code 0187T, scanning computerized ophthalmic diagnostic imaging, anterior segment, with interpretation and report, unilateral (**New 2008 CPT code**)

NOTE: See footnote 2 for medically necessary diagnoses for Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx Products only.

Other information

- For our Medical Technology Assessment Guidelines, see document # 350.

Documentation Requirements for our Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx products for anterior segment optical imaging

- Indications for SCODI must be described in the medical record.
- The primary diagnosis for SCODI, listed on the claim form, must support the medical necessity of the testing.
- The diagnosis must be present for the procedure to be paid.
- Medical records need not be submitted with the claim; however, the record must be furnished upon request or if services exceed the utilization guideline.
- Complete ophthalmology examination describing the indications supporting medical necessity must be available in the patient's medical record. This description should include any evidence of the following for patients who are/have:

Glaucoma Suspect:

- Anomalous appearing optic nerve
- Intraocular pressure > 22mmHg as measured by applanation
- Symmetric or vertically elongated cup enlargement, neural rim intact, cup to disc ratio > 0.4
- Focal optic disk notch
- Optic disk hemorrhage or history of optic disk hemorrhage

Glaucoma- No Glaucomatous Damage:

- Medical or surgical therapy has been initiated to prevent visual field loss

Glaucoma- Mild Glaucomatous Damage:

- Nasal step or small paracentral or arcuate scotoma
- Mild constriction of visual field isopters

Glaucoma- Moderate glaucomatous damage:

- Enlarged optic cup with neural rim remaining but sloped or pale, cup to disc ratio > 0.5, but <0.9
- Definite focal notch with thinning of the neural rim
- Definite glaucomatous visual field defect, e.g., arcuate or paracentral scotoma, nasal step, pencil wedge, or constriction of isopters.

Glaucoma- Advanced glaucomatous damage:

- Severe generalized constriction of isopters (i.e., Goldmann 14e > 10 degrees of fixation)
- Absolute visual field defects within 10 degrees of fixation
- Severe generalized reduction of retinal sensitivity
- Loss of central visual acuity, with temporal island remaining
- 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

Utilization guidelines for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx products for anterior segment optical imaging

- In the management of the patient who has one of the diagnoses listed in footnote 2 below, the rendering of SCODI is limited to once in a 12 month period. When SCODI is rendered *more frequently than once in a twelve month period*, the claim may be reviewed on a post-payment basis.

Policy update history

New Policy, effective 10/08. Reviewed 2/09 MPG - Psychiatry, Ophthalmology and Endocrinology, no changes in coverage were made. Updated 2/09 to align coverage of anterior eye segment optical imaging with Local Medicare LCD coverage criteria and to implement editing to support coverage when billed with CPT Category III code 0187T for our Medicare Advantage Products only; editing is effective 12/5/08 and is noted under footnote 2. Updated 9/09 after review of Medicare LCD (L30266) for Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI), effective 10/5/09.

References

References for Footnote 1:

1. Wolffsohn JS, Peterson RC. Anterior ophthalmic imaging. Clin Exp Optom 2006; 89(4):205-14.
2. Nolan WP, See JL, Chew PT et al. Detection of primary angle closure using anterior segment optical coherence tomography in Asian eyes. Ophthalmology 2007; 114(1):33-9.
3. Kalev-Landoy M, Day AC, Cordeiro MF et al. Optical coherence tomography in anterior segment imaging. Acta Ophthalmol Scand 2007; 85(4):427-30.

This document is designed for informational purposes only and is not an authorization, or an explanation of benefits, or a contract. Receipt of benefits is subject to satisfaction of all terms and conditions of the coverage. Medical technology is constantly changing, and we reserve the right to review and update our policies periodically.

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Footnotes

¹ Based upon BCBSA national policy 9.03.18 Anterior Eye Segment Optical Imaging issued 2/08.

² Anterior Eye Segment Optical Imaging is covered for our Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx products in accordance with NHIC Local Medicare Coverage Determination (LCD), #L10804, **effective 12/5/08**:
http://www.cms.hhs.gov/mcd/viewlcd.asp?lcd_id=10804&lcd_version=58&show=all **This LCD is retired effective 10/5/09.**

NHIC Local Medicare Coverage Determination (LCD), #L30266, **effective 10/5/09**:
http://www.cms.hhs.gov/mcd/viewlcd.asp?lcd_id=30266&lcd_version=3&show=all

ICD-9 codes that support medical necessity for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx products only include:

- 190.0: malignant neoplasm of eyeball, except conjunctiva, cornea, retina and choroid
- 190.3: malignant neoplasm of conjunctiva
- 190.4: malignant neoplasm of cornea
- 190.6: malignant neoplasm of choroid
- 190.8: malignant neoplasm of other specified sites of eye
- 224.0: benign neoplasm of eyeball, except conjunctiva, cornea, retina and choroid
- 224.3: benign neoplasm of conjunctiva
- 224.4: benign neoplasm of cornea
- 224.6: benign neoplasm of choroid
- 224.8: benign neoplasm of other specified parts of eye
- 360.51: foreign body, magnetic, in anterior chamber of eye

- 360.61: foreign body in anterior chamber
- 364.51: essential or progressive iris atrophy
- 364.52: iridoschisis
- 364.53: pigmentary iris degeneration
- 364.54: degeneration of pupillary margin
- 364.55: miotic cysts of pupillary margin
- 364.56: degenerative changes of chamber angle
- 364.57: degenerative changes of ciliary body
- 364.59: other iris atrophy
- 364.60: idiopathic cysts of iris, ciliary body, and anterior chamber
 - implantation cysts
- 364.62: exudative cysts of iris or anterior chamber
- 364.63: primary cyst of pars plana
- 364.64: exudative cyst of pars plana
- 364.70: adhesions of iris, unspecified
- 364.71: posterior synechiae of iris
- 364.72: anterior synchia of iris
- 364.73: goniosynechiae
- 364.74: adhesions and disruptions of pupillary membranes
- 364.75: pupillary abnormalities
- 364.76: iridodialysis
- 364.77: recession of chamber angle of eye
- 364.81: floppy iris syndrome
- 364.82: plateau iris syndrome
- 364.89: other disorders of iris and ciliary body
- 365.02: anatomical narrow angle borderline glaucoma
- 365.20-365.89: primary angle-closure glaucoma unspecified - other specified glaucoma
- 366.16: senile nuclear sclerosis
- 370.00-370.07: corneal ulcer unspecified – Mooren’s ulcer
- 371.00-371.05: corneal opacity unspecified – phthysical cornea
- 371.20-371.24: corneal edema unspecified – corneal edema due to wearing of contact lenses
- 371.50: hereditary corneal dystrophy unspecified
- 371.57: endothelial corneal dystrophy
- 371.71: corneal ectasia
- 371.72: descemetocoele
- 371.73: corneal staphyloma
- 372.40-372.45: pterygium unspecified – recurrent pterygium
- 379.31: aphakia
- 379.32: subluxation of lens
- 379.33: anterior dislocation of lens
- 379.39: other disorders of lens
- 996.51: mechanical complication of prosthetic corneal graft
- 996.53: mechanical complication of prosthetic ocular lens
- 996.69: infection and inflammatory reaction due to other internal prosthetic device, implant, and graft