Clinical Guideline



Oscar Clinical Guideline: Optical Coherence Tomography (OCT) (CG025, Ver. 11)

# Optical Coherence Tomography (OCT)

### Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.

TtCoverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.

#### Summary

Optical coherence tomography, or OCT, is a medical imaging test that uses light waves to capture live 3-dimensional images. It is similar in principle to ultrasound (which uses sound echoes, rather than light wave reflections), however OCT provides much higher spatial resolution. OCT has been used to image different structures of the body, including the eye, the heart, the gastrointestinal (GI) system, the breast, and the upper airway. In the eyes, OCT allows for imaging of the retina and optic nerve. This imaging is helpful in monitoring and treating retinal disorders or optic nerve disorders such as glaucoma. It does not require any contact with the target surfaces and does not produce any ionizing radiation. In some cases, OCT can be used with other instruments such as an endoscope in the GI system or as an intravascular device in the arteries of the heart. OCT is a relatively novel technology and is rapidly evolving in both technique and clinical utility. This guideline provides the clinical criteria and exclusions for the currently supported clinical applications of optical coherence tomography.

### **Definitions**

"Retinopathy" refers to diseases of the retina that may impair vision, and is most often due to diabetes or hypertension. Diabetic retinopathy can be "proliferative" or "nonproliferative", depending on the severity of the disease.

"Macular degeneration" is a condition that affects the macula, which is the central portion of the retina responsible for fine detail vision. It can be further categorized as "wet" or "dry" depending on the

underlying process, and stratified by stage (early, intermediate, late). Macular degeneration is a leading cause of vision loss.

"Macular edema" occurs when fluid builds up behind the macula of the eye, leading to swelling and distortion of central vision. Macular edema can occur in a number of diseases, including macular degeneration, diabetic retinopathy, and retinal vein occlusions.

"Optical coherence tomography (OCT)" is an imaging technique that uses the reflections of light particles to create live 3-D images. Because OCT is based on light, it has significantly higher spatial resolution than comparable imaging techniques such as ultrasound and MRI. However, given the poor penetration of light into tissue, OCT is limited to relatively superficial surfaces. OCT does not generate ionizing radiation. OCT can be used to evaluate the retinal, optic nerve, and anterior chamber.

- "Spectral domain OCT" is a newer version of OCT technology which can obtain images up to 50 times faster than traditional "time domain" and may be more appropriate in the diagnosis and assessment of certain conditions.
- "OCT angiography" or "intravascular OCT" refers to OCT imaging conducted with specialized, miniature devices from within a blood vessel.

"Posterior segment" refers to the back two-thirds of the eye, and includes the vitreous humor, retina, choroid, macula, and optic nerve.

"Anterior segment" refers to the anterior one-third of the eye, and includes the cornea, iris, ciliary body, and lens.

"Glaucoma suspect" refers to an individual with clinical findings and/or risk factors that indicate an elevated risk of developing primary open angle glaucoma. Risk factors include age older than 50 years, family history of glaucoma, and black race. Clinical findings include optic nerve or nerve fiber layer defect suggestive of glaucoma, visual field abnormality consistent with glaucoma, and/or elevated intraocular pressure (IOP) >21 mm Hg.

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### Medical Necessity Criteria for Clinical Review

### General Medical Necessity Criteria

The Plan considers posterior optical coherence tomography (OCT) medically necessary when any ONE of the following criteria is met:

- 1. Spectral-domain OCT (SD-OCT) is indicated when a member is taking chloroquine, hydroxychloroquine, ezogabine, or vigabatrin and ONE of the following criteria are met:
  - a. Baseline exam within the first year of medication use; or
  - b. As a once yearly exam for patients with 1 or more of the following:
    - i. 5 years or more of use; *or*
    - ii. Documentation of elevated risk for developing retinopathy, defined by:
      - 1. Concurrent macular disease; or
      - 2. Concurrent renal disease: or
      - 3. Concomitant use of tamoxifen; or
      - 4. High-dose chloroquine (>2.3mg/kg) or hydroxychloroquine (>5mg/kg).
- 2. Macular edema when at least ONE of the following criteria is met:
  - a. Needed to establish the diagnosis of macular edema; or
  - b. Cystoid macular edema; or
  - c. When the results may impact the treatment plan (e.g., the need for antiangiogenic treatment).
- 3. Macular degeneration when at least ONE of the following criteria is met:
  - a. Neovascular age-related macular degeneration and OCT needed to establish the diagnosis when fluorescein angiography is contraindicated or unavailable; *or*
  - b. Cystoid macular degeneration; or
  - c. Macular drusen associated with suspected age-related macular degeneration; or
  - d. When the results may impact the treatment plan (e.g. the need for antiangiogenic treatment).
- 4. OCT may be indicated to document the appearance of posterior segment structures in members who have a diagnosis of at least ONE of the following:
  - a. Benign neoplasms of the retina and choroid; or
  - b. Central serous retinopathy (CSR); or
  - c. Diabetic retinopathy; or
  - d. Glaucoma or glaucoma suspect, no more than once per year; or
  - e. Inherited retinal dystrophy (e.g., RPE65 gene mutations); or
  - f. Macular hole; or
  - g. Macular pucker (epiretinal membrane); or
  - h. Macular scar; or
  - i. Malignant neoplasms of the retina and choroid; or
  - j. Neurodegenerative disorders affecting the optic nerve (e.g., multiple sclerosis, optic neuritis); *or*
  - k. Other retinal disorders and retinopathy; or
  - I. Optic nerve atrophy; or

- m. Papilledema associated with increased intracranial pressure; or
- n. Pseudotumor cerebri; or
- o. Posterior vitreous detachment (vitreous degeneration); or
- p. Retinal vein occlusion; or
- q. Uveitis (intermediate, posterior, or panuveitis); or
- r. Vitreomacular adhesion or vitreomacular traction; or
- s. Vogt-Koyanagi-Haradas.

### Experimental or Investigational / Not Medically Necessary

The Plan considers optical coherence tomography (OCT) experimental, investigational, or unproven for the following indications, as the current evidence is insufficient to demonstrate clear clinical benefit:

- 1. Gastrointestinal usage, including but not limited to assessment or diagnosis of:
  - a. Esophageal mucosal diseases (e.g. Barrett's esophagus or squamous cell carcinoma)
  - b. Gastric mucosa
  - c. Diseases of the colon and small bowel (e.g. inflammatory bowel disorders, polyps)
  - d. Biliary and pancreatic duct measurements
- 2. Upper airway OCT for obstructive sleep apnea
- 3. Any intraoperative OCT, including OCT for the purpose of lymph node or tumor margin assessment
- 4. Ocular indications other than those specified in this guideline, including but not limited to:
  - a. Anterior segment OCT (AS-OCT) imaging (e.g., cornea, iris, ciliary body, and lens) is considered experimental/investigational as evidence is still insufficient for anterior OCT to be used as a substitute or as a stand-alone method for guiding treatment of anterior segment conditions. Overall, there is a lack of recommendations from society practice guidelines and peer-reviewed literature strongly supporting AS-OCT, and it has not been shown to improve net health outcomes.
    - i. Rationale: Gonioscopy is the gold-standard for evaluating the anterior segment of the eye, per the American Academy of Ophthalmology (AAO).
    - Upon review of recent literature, guidelines and Hayes, the role of anterior segment OCT is still evolving in the utility of AS-OCT for a variety of conditions or with different methodologies such as swept source anterior segment optical coherence tomography (SS-ASOCT). Although there may be some literature and cross-sectional studies on clinical validity for AS-OCT indications, overall, there is a lack of peer-reviewed literature supporting clinical utility with AS-OCT guided treatment in RCT trials or comparative trials with AS-OCT and another technology, placebo, or sham (Hayes, Inc., 2023; Fernández-Vigo et al., 2022; Marin et al., 2022; Preetam Peraka et al., 2023; Pujari et al., 2021; Triolo et al., 2021). The American Academy of Ophthalmology (AAO) Preferred Practice Patterns for Primary Angle Closure (2015) state that AS-OCT is "limited to evaluating the iridocorneal angle" and that it "may prove useful in evaluating

- secondary causes of angle closure". Gonioscopy is discussed as the gold standard to be performed in all patients with suspected angle closure. There have been no large, prospective, randomized clinical trials looking at the clinical effectiveness of AS-OCT for primary angle closure.
- For the 2023 Cornea/External Disease Summary Benchmarks, anterior segment optical coherence tomography is listed in the preferred practice pattern guidelines as an applicable diagnostic test, but not an explicit recommendation for Corneal Edema and Opacification (Initial Evaluation). For the 2023 Retina Summary Benchmarks, the preferred practice pattern guidelines mention that an OCT evaluation may be indicated to document post-op macular anatomy for a macular hole post-operative follow-up visit, but does not explicitly recommend OCT for the anterior chamber and central retina.
- A 2022 systematic review by Marin and colleagues assessed anterior segment-OCT and image analysis methods as this field is less developed compared to posterior segment-OCT; however, comparisons for AS-OCT were difficult due to limited number of images from studies and additional research is needed.
- For lens-to-cornea fit of rigid gas-permeable (RGP) lenses: Piotrowiak et al (2014) showed AS-OCT was inferior to fluorescein pattern assessment, with lower sensitivity for apical clearance detection.
- Anterior chamber angle (ACA) measurement Maram et al (2015) looked at 20
  eyes and found low reproducibility among experienced clinicians. Further
  literature is limited for this indication.
- Other potential indications for AS-OCT, including but not limited to intraoperative OCT, graft versus host disease (GVHD), anterior segment vascular imaging, and assessment of Haab striae, have inadequate clinical evidence in the currently available literature.
- 5. Routine *screening* of asymptomatic members for ocular conditions, including but not limited to the following:
  - a. Glaucoma, pre-glaucoma, or ocular hypertension
    - i. Rationale: The USPSTF (2022) concludes that for asymptomatic adults 40 years or older, the current evidence is insufficient to assess the balance of benefits and harms of screening (e.g., OCT, visual field assessment) for primary open-angle glaucoma in adults. Bussel et al (2014) summarized the findings of 7 studies on glaucoma screening and monitoring of progression using OCT. They found that "in summary, OCT currently lacks the necessary diagnostic performance for general population glaucoma screening." While there is some evidence of the ability of OCT to differentiate normal and glaucomatous eyes, the current clinical evidence has not been fully validated.

### b. Cataracts

i. Rationale: OCT is not used for the diagnosis or screening of cataracts. OCT has been used in the pre-operative planning or for monitoring of post-operative

complications following cataract surgery; however, the clinical evidence is limited for these indications. Furthermore, the presence of cataracts may impact OCT image quality and retinal thickness measurements (Van Velthoven 2006).

- c. Corneal conditions, including but not limited to keratitis, Thygeson's disease
- d. Keratoconjunctivitis sicca (i.e., dry eyes)
  - i. Rationale: A single center, prospective study by Ibrahim et al (2010) looked at OCT for diagnosing keratoconjunctivitis sicca in 24 patients and 27 control subjects. Sensitivity and specificity were 67% and 81%, respectively. Further research is needed to identify the clinical outcomes using OCT for this indication.
- e. Posterior capsule opacification
- f. Neurodegenerative disorders that may affect the optic nerve
  - i. Rationale: Routine OCT screening for neurodegenerative disorders that may affect the optic nerve in asymptomatic individuals with a normal eye exam is not indicated. OCT has not been adequately studied for this purpose.
- g. Papilledema or unexplained vision loss (not caused by diabetic retinopathy or pseudotumor cerebri)
  - i. Rationale: Extensive literature review by the AAO states that there is not currently enough randomized evidence to use OCT for routine evaluation of unexplained vision loss, in routine screening for diabetic retinopathy, or for "other causes" of macular swelling. OCT is not mentioned as indicated or not indicated for other disease processes in the AAO guidelines.
- 6. Identification of fungal endophthalmitis after cataract surgery
  - a. *Rationale:* The evidence for the use of AS-OCT in the identification of fungal infections after cataract surgery is limited to case reports (Kitahata 2016) and has not been validated in a randomized, prospective clinical trial.
- 7. Imaging of extra- or intra-ocular musculature
  - a. Rationale: Several studies (Pihlblad 2016, Ngo 2015, Park 2014) have looked at AS-OCT for imaging of the ocular musculature. While the results on the ability to accurately and reproducibly measure the muscle insertion distances for pre-operative planning have been promising, the current evidence has not been validated in clinical studies nor has it demonstrated any improved clinical outcomes.
- 8. Any other procedure or indication not meeting the medical necessity criteria

The Plan considers OCT angiography or intravascular OCT experimental or investigational, as the current evidence is insufficient to demonstrate clear clinical benefit. This includes, but is not limited to:

- 1. Diagnosis of spontaneous coronary artery dissection (SCAD)
- 2. Diagnosis or assessment of coronary artery plaques
- 3. Treatment of coronary disease (as an adjunct to percutaneous coronary intervention (PCI)
- 4. Assessment or guidance of coronary artery stent placement (including evaluation of arterial bifurcations)

- 5. Assessment of coronary artery stent failure (malposition)
- 6. Identification of angiographically unclear lesions
- 7. Assessment of acute coronary syndromes
- 8. Diagnosis or assessment of intracranial aneurysms, ruptured or intact
- 9. Assessment of carotid artery stenosis and/or stroke risk
- 10. Assessment of pulmonary arterial wall fibrosis

#### Clinical Evidence on Intravascular OCT

- 1. A systematic review of 15 studies was published in 2015 by D'Ascenzo et al. to evaluate the accuracy of intravascular OCT and intravascular ultrasound (IVUS) in identifying functional coronary stenosis. The group found that both modalities had only a moderate diagnostic accuracy for hemodynamically significant lesions. The authors concluded that both the sensitivity and specificity were inadequate to guide revascularization. (D'Ascenzo F, Barbero U, Cerrato E, et al. Accuracy of intravascular ultrasound and optical coherence tomography in identifying functionally significant coronary stenosis according to vessel diameter: a meta-analysis of 2,581 patients and 2,807 lesions. Am Heart J. 2015; 169(5):663-673)
- 2. The Society of Cardiovascular Angiography and Interventions released a consensus statement in 2014 evaluating IVUS and intravascular OCT, concluding that "the appropriate role for optical coherence tomography in routine clinical decision making has not been established". (Lotfi A, Jeremias A, Fearon WF, et al. Society of Cardiovascular Angiography and Interventions. Expert consensus statement on the use of fractional flow reserve, intravascular ultrasound, and optical coherence tomography: a consensus statement of the Society of Cardiovascular Angiography and Interventions. Catheter Cardiovasc Interv. 2014; 83(4):509-418)
- 3. The ILUMIEN IV study (NCT NCT03507777) is underway for a prospective, single-blind clinical investigation randomizing subjects to OCT-guided coronary stent implantation vs. angiography-guided coronary stent implantation in a 1:1 ratio. The clinical investigation will be conducted at approximately 125 centers in North America (US and Canada), Europe, Middle East and Asia-Pacific. After hospital discharge, all patients will have clinical follow-up at 30 days, 1 year, and 2 years. As of April, 2024, the publication for this ILUMIEN IV study has not been completed. The ILUMIEN III: OPTIMIZE PCI trial was performed to compare IVUS, OCT, and coronary angiography (CA) in guiding coronary stent placement. The randomized study demonstrated that IVUS and OCT were non-inferior, however CA was superior to both modalities. (Ali ZA, Maehara A, Généreux P, et al. Optical coherence tomography compared with intravascular ultrasound and angiography to guide coronary stent implantation (ILUMIEN III: OPTIMIZE PCI): a randomised controlled trial. Lancet 2016; 388:2618.)
- 4. For coronary plaque characterization and stent implantation for coronary artery revascularization, the FDA has 510(k) clearance for Tigereye Cto-Crossing Catheter, Pantheris System, Optis Mobile Next Imaging System, Optis Integrated Next Imaging System, Otis 2.1 Optical Coherence Tomography System, Thia Optical Coherence Tomography System, Apollovue S100 Image System. The 2021 ACC/AHA/SCA Guideline states that, "In patients undergoing coronary stent implantation, OCT is a reasonable alternative to IVUS for procedural guidance, except in

ostial left main disease" (2a) and "In patients with stent failure, IVUS or OCT is reasonable to determine the mechanism of stent failure. (2a)" However, because OCT requires blood clearance, its effectiveness for imaging ostial left main disease is limited. The results of the ILUMIEN IV study will be pivotal for practice guidance.

## Applicable Billing Codes

Table 1	
CPT/HCPCS codes considered medically necessary if criteria are met:	
Code	Description
92133	Scanning computerized ophthalmic diagnostic imaging (eg, optical coherence tomography [OCT]), posterior segment, with interpretation and report, unilateral or bilateral; optic nerve
92134	Scanning computerized ophthalmic diagnostic imaging (eg, optical coherence tomography [OCT]), posterior segment, with interpretation and report, unilateral or bilateral; retina

Table 2	
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
Code	Description
C69.20 - C69.22	Malignant neoplasm of choroid
C69.30 - C69.32	Malignant neoplasm of retina
D18.09	Hemangioma of other sites
D31.20 - D31.22	Benign neoplasm of retina
D31.30 - D31.32	Benign neoplasm of choroid
E08.311 - E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy
E08.321 - E08.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy
E08.331 - E08.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy
E08.341 - E08.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy

Table 2		
ICD-10 codes c	ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
Code	Description	
E08.3511 - E08.3599	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy	
E09.311 - E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy	
E09.321 - E09.329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy	
E09.331 - E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy	
E09.341 - E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy	
E09.3511 - E09.3599	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy	
E10.311 - E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy	
E10.321 - E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy	
E10.331 - E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy	
E10.341 - E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy	
E10.3511 - E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy	
E11.311 - E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy	
E11.321 - E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy	
E11.331 - E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy	
E11.341 - E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy	

Table 2	
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
Code	Description
E11.3511 - E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy
E13.311 - E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy
E13.321 - E13.329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy
E13.331 - E13.339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy
E13.341 - E13.349	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy
E13.3511 - E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy
G35	Multiple sclerosis
G40.201 - G40.219	Localization-related (focal)(partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures
G40.401 - G40.409	Other generalized epilepsy and epileptic syndromes, not intractable
G40.411 - G40.419	Other generalized epilepsy and epileptic syndromes, intractable
G40.821 - G40.824	Epileptic spasms
G93.2	Benign intracranial hypertension
H20.821 - H20.823	Vogt-Koyanagi syndrome
H30.891 - H30.899	Other chorioretinal inflammations
H31.011 - H31.019	Macula scars of posterior pole (postinflammatory) (post-traumatic)
H34.8110 - H34.9	Retinal vascular occlusions
H35.00 - H35.09	Background retinopathy and retinal vascular changes

Table 2		
ICD-10 codes cons	ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
Code	Description	
H35.101 - H35.179	Retinopathy of prematurity	
H35.20 - H35.23	Other non-diabetic proliferative retinopathy	
H35.30	Unspecified macular degeneration  Age-related macular degeneration	
H35.3110 - H35.3194	Nonexudative age-related macular degeneration	
H35.3210 - H35.3293	Exudative age-related macular degeneration	
H35.341 - H35.349	Macular cyst, hole or pseudohole	
H35.351 - H35.359	Cystoid macular degeneration	
H35.361 - H35.369	Drusen (degenerative) of macula	
H35.371 - H35.379	Puckering of macula	
H35.50 - H35.54	Hereditary retinal dystrophy	
H35.711	Central serous chorioretinopathy, right eye	
H35.712	Central serous chorioretinopathy, left eye	
H35.713	Central serous chorioretinopathy, bilateral	
H35.81	Retinal edema	
H40.001 - H40.9	Glaucoma	
H42	Glaucoma in diseases classified elsewhere	
H43.811 - H43.819	Vitreous degeneration	
H43.821 - H43.829	Vitreomacular adhesion	
H43.89	Other disorders of vitreous body	
H44.11 - H44.119	Panuveitis	

Table 2	
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
Code	Description
H46.0 - H46.9	Optic neuritis
H47.091 - H47.099	Other disorders of optic nerve, not otherwise classified
H47.11	Papilledema associated with increased intracranial pressure
H59.031- H59.039	Cystoid macular edema following cataract surgery
Q15.0	Congenital glaucoma
T37.2X1A - T37.2X1S	Poisoning by antimalarials and drugs acting on other blood protozoa, accidental (unintentional)
T37.2X2A - T37.2X2S	Poisoning by antimalarials and drugs acting on other blood protozoa, intentional self-harm
T37.2X3A - T37.2X3S	Poisoning by antimalarials and drugs acting on other blood protozoa, assault
T37.2X4A - T37.2X4S	Poisoning by antimalarials and drugs acting on other blood protozoa, undetermined
Z79.899	Other long term (current) drug therapy

Table 3	
ICD-10 codes considered experimental or investigational with Table 1 codes:	
Code	Description
C69.10 - C69.12	Malignant neoplasm of cornea
C69.40 - C69.42	Malignant neoplasm of ciliary body
D31.10 - D31.12	Benign neoplasm of cornea
D31.40 - D31.42	Benign neoplasm of ciliary body
D89.810 - D89.813	Graft-versus-host disease
G47.33	Obstructive sleep apnea (adult) (pediatric)

Table 3		
ICD-10 codes con	ICD-10 codes considered experimental or investigational with Table 1 codes:	
Code	Description	
H04.121 - H04.129	Dry eye syndrome	
H16.001 - H16.9	Keratitis	
H17.00 - H17.89	Corneal scars and opacities	
H18.001 - H18.069	Other disorders of cornea	
H20.00 - H20.9	Iridocyclitis	
H21.00 - H21.9	Hyphema	
H22	Disorders of iris and ciliary body in diseases classified elsewhere	
H25.011 - H25.9	Age-related cataract	
H26.001 - H26.9	Other cataract	
H27.00 - H27.9	Other disorders of lens	
H28	Cataract in diseases classified elsewhere	
H47.10	Unspecified papilledema	
H47.12	Papilledema associated with decreased ocular pressure	
H47.13	Papilledema associated with retinal disorder	
H49.00 - H52.7	Disorders of ocular muscles, binocular movement, accommodation and refraction	
H53.121 - H53.129	Transient visual loss	
H53.131 - H53.139	Sudden visual loss	
K20.0 - K31.A29	Diseases of esophagus, stomach and duodenum	

Table 3	
ICD-10 codes considered experimental or investigational with Table 1 codes:	
Code	Description
K50.00 - K52.9	Noninfective enteritis and colitis
K55.011 - K64.9	Other diseases of intestines
M35.00 - M35.09	Sjogren syndrome Sicca syndrome
Q12.0 - Q12.9	Congenital lens malformations
Z13.5	Encounter for screening for eye and ear disorders
Z46.0	Encounter for fitting and adjustment of spectacles and contact lenses

Table 4	
CPT/HCPCS codes	considered experimental or investigational for indications in this guideline:
Code	Description
92132	Scanning computerized ophthalmic diagnostic imaging (eg, optical coherence tomography [OCT]) anterior segment, with interpretation and report, unilateral or bilateral
92978	Endoluminal imaging of coronary vessel or graft using intravascular ultrasound (IVUS) or optical coherence tomography during diagnostic evaluation and/or therapeutic intervention including imaging supervision, interpretation and report; initial vessel (List separately in addition to code for primary procedure)
92979	Endoluminal imaging of coronary vessel or graft using intravascular ultrasound (IVUS) or optical coherence tomography (OCT) during diagnostic evaluation and/or therapeutic intervention including imaging supervision, interpretation and report; each additional vessel (List separately in addition to code for primary procedure)
0351T	Optical coherence tomography of breast or axillary lymph node, excised tissue, each specimen; real time intraoperative
0352T	Optical coherence tomography of breast or axillary lymph node, excised tissue, each specimen; interpretation and report, real-time or referred

Table 4	
CPT/HCPCS codes considered experimental or investigational for indications in this guideline:	
Code	Description
0353T	Optical coherence tomography of breast, surgical cavity; real-time intraoperative
0354T	Optical coherence tomography of breast, surgical cavity; interpretation and report, real-time or referred

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### Clinical Guideline Revision / History Information

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