

LCD - Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) (L34760)

Links in PDF documents are not guaranteed to work. To follow a web link, please use the MCD Website.

Contractor Information

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATES
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	05101 - MAC A	J - 05	Iowa
Wisconsin Physicians Service Insurance Corporation	MAC - Part B	05102 - MAC B	J - 05	Iowa
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	05201 - MAC A	J - 05	Kansas
Wisconsin Physicians Service Insurance Corporation	MAC - Part B	05202 - MAC B	J - 05	Kansas
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	05301 - MAC A	J - 05	Missouri - Entire State
Wisconsin Physicians Service Insurance Corporation	MAC - Part B	05302 - MAC B	J - 05	Missouri - Entire State
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	05401 - MAC A	J - 05	Nebraska
Wisconsin Physicians Service Insurance Corporation	MAC - Part B	05402 - MAC B	J - 05	Nebraska
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	05901 - MAC A	J - 05	Alabama Alaska Arizona Arkansas California - Entire State Colorado Connecticut Delaware Florida Georgia Hawaii Idaho Illinois Indiana Iowa Kansas Kentucky

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATES
				Louisiana Maine Maryland Massachusetts Michigan Mississippi Missouri - Entire State Montana Nebraska Nevada New Hampshire New Jersey New Mexico North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	08101 - MAC A	J - 08	Indiana
Wisconsin Physicians Service Insurance Corporation	MAC - Part B	08102 - MAC B	J - 08	Indiana
Wisconsin Physicians Service Insurance Corporation	MAC - Part A	08201 - MAC A	J - 08	Michigan
Wisconsin Physicians Service Insurance Corporation	MAC - Part B	08202 - MAC B	J - 08	Michigan

LCD Information

Document Information

LCD ID

L34760

LCD Title

Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI)

Proposed LCD in Comment Period

N/A

Source Proposed LCD

N/A

Original Effective Date

For services performed on or after 10/01/2015

Revision Effective Date

For services performed on or after 06/29/2023

Revision Ending Date

N/A

Retirement Date

N/A

Notice Period Start Date

N/A

Notice Period End Date

N/A

Issue

Issue Description

Biannual review completed with no change in coverage. Minor grammatical and punctuation changes made throughout.

CMS National Coverage Policy

Title XVIII of the Social Security Act (SSA): Section 1862(a)(1)(A) excludes expenses incurred for items or services which are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member.

AMA CPT / ADA CDT / AHA NUBC Copyright Statement

CPT codes, descriptions and other data only are copyright 2022 American Medical Association. All Rights Reserved. Applicable FARS/HHSARS apply.

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

Current Dental Terminology © 2022 American Dental Association. All rights reserved.

Copyright © 2023, the American Hospital Association, Chicago, Illinois. Reproduced with permission. No portion of the American Hospital Association (AHA) copyrighted materials contained within this publication may be copied without the express written consent of the AHA. AHA copyrighted materials including the UB04 codes and descriptions may not be removed, copied, or utilized within any software, product, service, solution or derivative work without the written consent of the AHA. If an entity wishes to utilize any AHA materials, please contact the AHA at 312 893 6816.

Making copies or utilizing the content of the UB04 Manual, including the codes and/or descriptions, for internal purposes, resale and/or to be used in any product or publication; creating any modified or derivative work of the UB04 Manual and/or codes and descriptions; and/or making any commercial use of UB04 Manual or any portion thereof, including the codes and/or descriptions, is only authorized with an express license from the American Hospital Association. The American Hospital Association (the "AHA") has not reviewed, and is not responsible for, the completeness or accuracy of any information contained in this material, nor was the AHA or any of its affiliates, involved in the preparation of this material, or the analysis of information provided in the material. The views and/or positions presented in the material do not necessarily represent the views of the AHA. CMS and its products and services are not endorsed by the AHA or any of its affiliates.

Section 1833(e) prohibits Medicare payment for any claim which lacks the necessary information to process the claim.

Code of Federal Regulations: 42 CFR, Section 410.32, indicates that diagnostic tests may only be ordered by the treating physician (or other treating practitioner acting within the scope of his or her license and Medicare requirements) who furnishes a consultation or treats a beneficiary for a specific medical problem and who uses the results in the management of the beneficiary's specific medical problem. Tests not ordered by the physician (or other qualified non-physician provider) who is treating the beneficiary are not reasonable and necessary (see Sec.411.15(k)(1) of this chapter).

CMS Publication 100-03, Medicare National Coverage Determinations Manual, Chapter 1:

Part 1: Section: 80.6 Intraocular Photography; 80.9, Computer Enhanced Perimetry.

Part 2: Section: 140.5 Laser Procedures

Part 4: Section: 220.1 Computerized Tomography (CT)

Change Request 10901, Local Coverage Determinations (LCDs)

CMS IOM Publication 100-08, Medicare Program Integrity Manual, Chapter 13, Section 13.5.4 – Reasonable and Necessary Provisions in an LCD.

Coverage Guidance

Coverage Indications, Limitations, and/or Medical Necessity

Medicare will consider scanning computerized ophthalmic diagnostic imaging (SCODI) medically reasonable and necessary in evaluating retinal disorders, glaucoma, and anterior segment disorders as documented in this local coverage determination (LCD).

SCODI includes the following tests:

- **Confocal Laser Scanning Ophthalmoscopy (topography)** uses stereoscopic videographic digitized images to make quantitative topographic measurements of the optic nerve head and surrounding retina.
- **Scanning Laser Polarimetry (nerve fiber analyzer)** measures change in the linear polarization of light (retardation). It uses both a polarimeter (an optical device to measure linear polarization change) and a scanning laser ophthalmoscope, to measure the thickness of the nerve fiber layer of the retina.
- **Optical Coherence Tomography (OCT)** a non-invasive, non-contact imaging technique.

OCT, especially SCODI, produces high resolution, cross-sectional tomographic images of ocular structures and is used for the evaluation of the optic nerve head, nerve fiber layer, and retina.

Scanning computerized ophthalmic diagnostic imaging allows earlier detection of glaucoma and more sophisticated analysis for ongoing management. 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 time than visual fields and/or disc photos. This allows earlier and more efficient efforts of treatment toward the disease process.

Indications

Glaucoma

Glaucoma is a leading cause of blindness, and a disease for which treatment methods clearly are available and in common use. Glaucoma also is diagnostically challenging. Almost 50% of glaucoma cases remain undetected.

Elevated intraocular pressure (IOP) is a clear risk factor for glaucoma, but over 30% of those suffering from the disease have pressures in the normal range.

Glaucoma commonly causes a spectrum of related eye and vision changes including erosion of the optic nerve and the associated retinal nerve fibers, and loss of peripheral vision. A diagnosis of glaucoma is not made on the basis of a single clinical observation, but instead relies upon analysis of an assemblage of clinical data including optic nerve, retinal nerve fiber, and anterior chamber structures, as well as looking for hemorrhages of the optic nerve, pigment in the anterior chamber, and especially visual field loss. Each of these methods has its own strengths and limitations, thus the dependence upon multiple observations. Careful reliance upon all available clinical data can allow early treatment and can prevent unnecessary end-stage therapies.

SCODI allows earlier detection of those patients with normal tension glaucoma and more sophisticated analysis for ongoing management. Because SCODI detects glaucomatous damage to the nerve fiber layer or optic nerve of the eye, it can distinguish patients with glaucomatous damage irrespective of the status of IOP. It may separate patients with elevated IOP and early glaucoma damage from those without glaucoma.

Technological improvements have rendered SCODI as a valuable diagnostic tool in the diagnosis and treatment of glaucoma. These improvements enable discernment of changes of the optic nerve and nerve fiber layer, even in advanced cases of glaucoma.

It is expected that only two (SCODI) exams/eye/year would be required to manage the patient who has glaucoma or is suspected of having glaucoma.

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 vitreoretinal interface. SCODI is useful to measure the effectiveness of therapy, and in determining the need for ongoing therapy, or the safety of cessation of that therapy.

Retinal thickness analysis is a non-invasive and non-contact imaging technique that takes direct cross-sectional images of the retina. These high-resolution images capture ocular structures and provide data to create thickness maps of the retina. Retinal thickness is directly correlated to ocular disease, including retinal disorders and glaucoma. In contrast, Scanning Laser Polarimetry is not an appropriate diagnostic technique for the management of retinal disorders.

Long Term Use of Chloroquine and or Hydroxychloroquine

Clinical evidence has shown that long-term use of chloroquine (CQ) and/or hydroxychloroquine (HCQ) can lead to irreversible retinal toxicity. Therefore, these two medications are deemed high risk, and scanning optical coherence tomography may be indicated to provide a baseline prior to starting the medication and as an annual follow-up. Clinical evidence shows that the resolution of time domain OCT instruments is not sufficient to detect early toxic retinal changes. Because of that, spectral domain-optical coherence tomography (SD-OCT) is expected to be used to detect retinal changes that are due to the use of CQ or HCQ.

Anterior Segment Disorders

SCODI may be used to examine the structures in the anterior segment structures of the eye. However, it is still seen as experimental/investigational except in the following:

1. Narrow angle, suspected narrow angle, and mixed narrow and open angle glaucoma
2. Determining the proper intraocular lens for a patient who has had prior refractive surgery and now requires cataract extraction
3. Iris tumor

4. Presence of corneal edema or opacity that precludes visualization or study of the anterior chamber
5. Calculation of lens power for cataract patients who have undergone prior refractive surgery. Payment will only be made for the cataract codes as long as additional documentation is available in the patient record of their prior refractive procedure. Payment will not be made in addition to A-scan or IOL master.

Limitations

The following procedures would generally not be necessary with SCODI. When medically needed the same day, documentation must justify the procedures.

1. Fundus photography with interpretation and report
2. Ophthalmoscopy extended with retinal drawing (e.g., For retinal detachment, melanoma) with interpretation and report initial
3. Subsequent ophthalmoscopy
4. B-scan (with or without superimposed non-quantitative A-scan)

Summary of Evidence

N/A

Analysis of Evidence (Rationale for Determination)

N/A

General Information

Associated Information

Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for services. This documentation includes, but is not limited to, relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.

Utilization Guidelines

Optic Nerve Damage

SCODI will be considered medically necessary usually only for 1 or 2 tests per year per patient.

SCODI would rarely be necessary or beneficial with patients who have advanced optic nerve damage.

Retinal Damage

It is expected that no more than 1 exam per eye every 2 months would be required to manage the patient whose primary ophthalmological condition is related to a retinal disease.

Patients with retinal conditions undergoing active intravitreal drug treatment may be allowed 1 scan per month per eye. These conditions include age-related macular degeneration (wet), choroidal neovascularization, macular edema, diabetic retinopathy (proliferative and nonproliferative), branch retinal vein occlusion, central retinal vein occlusion, and cystoid macular edema.

In addition, other conditions which may undergo rapid clinical changes monthly requiring aggressive therapy and

frequent follow-up, such as macular hole and traction retinal detachment, may also require monthly scans.

Compliance with the provisions in this policy may be monitored and addressed through post payment data analysis and subsequent medical review audits.

Sources of Information

N/A

Bibliography

1. American Academy of Ophthalmology Glaucoma Panel. Preferred practice pattern® guidelines primary open-angle glaucoma suspect. *American Academy of Ophthalmology*. 2010.
2. Bayer A, Harasymowycz P, Henderer JD, Steinmann WG, Spaeth GL. Validity of a new disk grading scale for estimating glaucomatous damage: correlation with visual field damage. *Am J Ophthalmol*. 2002;133(6):758-763.
3. Garcia JPS, Cruz J, Rosen RB, Buxton DF. Imaging implanted keratoprotheses with anterior-segment optical coherence tomography and ultrasound biomicroscopy. *Cornea*. 2008;27(2):180-188.
4. Garcia JPS, Garcia PMT, Buxton DE, Panarell, A, Rosen RB. Imaging through opaque corneas using anterior segment optical coherence tomography. *Ophthalmic Surg Lasers Imaging*. 2007;38(4):314-318.
5. Kim HY, Budenz DL, Lee PS, Feuer WJ, Barton K. Comparison of central corneal thickness using anterior segment optical coherence tomography vs. ultrasound pachymetry. *Am J Ophthalmol*. 2008;145(2):228-232.
6. Marmor MF, Kellner U, Lai TY, Lyons JS, Mieler WF. Revised recommendations on screening for chloroquine and hydroxychloroquine retinopathy. *Ophthalmology*. 2011;114:1221-1228.
7. McDonald HR, Williams GA, Scott IU, Haller JA, Maguire AM, Marcus DM. Laser scanning imaging for macular disease: a report by the American Academy of Ophthalmology. *Ophthalmology*. 2007;114(6):1221-1228.
8. Pasadhika S, Fishman GA. Effects of chronic exposure to hydroxychloroquine or chloroquine on inner retinal structures. *Eye (Lond)*. 2010;24(2)340-346.
9. Pinkerton RM. The Bjerrum area in ocular hypertension. *Investigative Ophthalmology*. 1969;8(1),91-96.
10. Rodriguez-Padilla JA, Hedges TR III, Monson B, et al. High-speed ultra-high-resolution optical coherence tomography findings in hydroxychloroquine retinopathy. *Arch Ophthalmol*. 2007;125(6)775-780.

Revision History Information

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
06/29/2023	R11	06/29/2023 Biannual review completed with no change in coverage. Minor grammatical and punctuation changes made throughout.	<ul style="list-style-type: none"> • Other (Review)
09/30/2021	R10	09/30/2021 Review completed 08/31/2021. Grammar and punctuations corrections made throughout the LCD. Acronyms were defined and inserted where appropriate. Relocated references listed under "Sources of Information" to "Bibliography", and AMA formatting corrections made.	<ul style="list-style-type: none"> • Other (Review)
11/01/2019	R9	11/01/2019 Placed links to specified NCDs in Related National Coverage Documents. Format revisions completed. No change in	<ul style="list-style-type: none"> • Other

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
		coverage.	
08/29/2019	R8	08/29/2019 Change Request 10901 Local Coverage Determinations (LCDs): it will no longer be appropriate to include Current Procedure Terminology (CPT)/Health Care Procedure Coding System (HCPCS) codes or International Classification of Diseases Tenth Revision-Clinical Modification (ICD-10-CM) codes in the LCDs. All CPT/HCPCS, ICD-10 codes, and Billing and Coding Guidelines have been removed from this LCD and placed in Billing and Coding: Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) Article linked to this LCD. The applicable manual/regulation has been referenced in CMS National Coverage Policy Section. Review completed 08/08/2019. There will not be a lapse in coverage and there has been no change to the coverage content of this LCD.	<ul style="list-style-type: none"> Other (Changes in response to CMS Change Request 10901. Review completed.)
09/01/2018	R7	09/01/2018 Annual review completed 08/07/2018 with no change in coverage. Typographical error corrected. Formatting change made.	<ul style="list-style-type: none"> Other (Annual Review)
09/01/2017	R6	09/01/2017 Annual review completed 08/09/2017 with no change in coverage. Typographical error corrected. At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires comment and notice. This revision is not a restriction to the coverage determination; and, therefore not all the fields included on the LCD are applicable as noted in this policy.	<ul style="list-style-type: none"> Other (Annual Review)
10/01/2016	R5	10/01/2016 ICD-10 code changes Group 1 and group 2 added codes H40.1110, H40.1111, H40.1112, H40.1113, H40.1114, H40.1120, H40.1121, H40.1122, H40.1123, H40.1124, H40.1130, H40.1131, H40.1132, H40.1133, H40.1134. Deleted codes H40.11X0, H40.11X1, H40.11X2, H40.11X3, H40.11X4 Added to group 3 E08.3211, E08.3212, E08.3213, E08.3291, E08.3292, E08.3293, E08.3311, E08.3312, E08.3313, E08.3391, E08.3392, E08.3393, E08.3411, E08.3412, E08.3413, E08.3491, E08.3492, E08.3493, E08.3511, E08.3512, E08.3513, E08.3521, E08.3522, E08.3523, E08.3529, E08.3531, E08.3532, E08.3533, E08.3541, E08.3542, E08.3543, E08.3551, E08.3552, E08.3553, E08.3591, E08.3592, E08.3593, E08.37X1, E08.37X2, E08.37X3, E09.3211, E09.3212, E09.3213, E09.3291, E09.3292, E09.3293, E09.3311, E09.3312, E09.3313, E09.3391, E09.3392, E09.3393, E09.3411, E09.3412, E09.3413, E09.3491, E09.3492, E09.3493, E09.3511, E09.3512, E09.3513, E09.3521, E09.3522, E09.3523,	<ul style="list-style-type: none"> Revisions Due To ICD-10-CM Code Changes

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
		<p>E09.3531, E09.3532, E09.3533, E09.3541, E09.3542, E09.3543, E09.3551, E09.3552, E09.3553, E09.3591, E09.3592, E09.3593, E09.37X1, E09.37X2, E09.37X3, E09.37X9, E10.3211, E10.3212, E10.3213, E10.3291, E10.3292, E10.3293, E10.3311, E10.3312, E10.3313, E10.3391, E10.3392, E10.3393, E10.3411, E10.3412, E10.3413, E10.3491, E10.3492, E10.3493, E10.3511, E10.3512, E10.3513, E10.3521, E10.3522, E10.3523, E10.3531, E10.3532, E10.3533, E10.3541, E10.3542, E10.3543, E10.3551, E10.3552, E10.3553, E10.3591, E10.3592, E10.3593, E10.37X1, E10.37X2, E10.37X3, E11.3211, E11.3212, E11.3213, E11.3291, E11.3292, E11.3293, E11.3311, E11.3312, E11.3313, E11.3391, E11.3392, E11.3393, E11.3411, E11.3412, E11.3413, E11.3491, E11.3492, E11.3493, E11.3511, E11.3512, E11.3513, E11.3521, E11.3522, E11.3523, E11.3531, E11.3532, E11.3533, E11.3541, E11.3542, E11.3543, E11.3551, E11.3552, E11.3553, E11.3591, E11.3592, E11.3593, E11.37X1, E11.37X2, E11.37X3, E13.3211, E13.3212, E13.3213, E13.3291, E13.3292, E13.3293, E13.3311, E13.3312, E13.3313, E13.3391, E13.3392, E13.3393, E13.3411, E13.3412, E13.3413, E13.3491, E13.3492, E13.3493, E13.3511, E13.3512, E13.3513, E13.3521, E13.3522, E13.3523, E13.3531, E13.3532, E13.3533, E13.3541, E13.3542, E13.3543, E13.3551, E13.3552, E13.3553, E13.3591, E13.3592, E13.3593, E13.37X1, E13.37X2, E13.37X3, H34.8110, H34.8111, H34.8112, H34.8120, H34.8121, H34.8122, H34.8130, H34.8131, H34.8132, H34.8310, H34.8311, H34.8312, H34.8320, H34.8321, H34.8322, H34.8330, H34.8331, H34.8332, H35.3110, H35.3111, H35.3112, H35.3113, H35.3114, H35.3120, H35.3121, H35.3122, H35.3123, H35.3124, H35.3130, H35.3131, H35.3132, H35.3133, H35.3134, H35.3210, H35.3211, H35.3212, H35.3213, H35.3220, H35.3221, H35.3222, H35.3223, H35.3230, H35.3231, H35.3232, H35.3233,</p> <p>Deleted from group 3 E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, H34.811, H34.812, H34.813, H34.831, H34.832, H34.833, H35.31, H35.32. Annual review.</p>	
10/01/2015	R4	01/01/2016 added codes H59.031, H59.032, H59.033 to group 3 effective 10/01/2015.	<ul style="list-style-type: none"> • Revisions Due To ICD-10-CM Code Changes

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
10/01/2015	R3	12/01/2015 Added code H35.363 and H33.001 under group 3 effective 10/01/2015, Annual review, removed CAC information.	<ul style="list-style-type: none"> • Other (Maintenance annual review.) • Revisions Due To ICD-10-CM Code Changes
10/01/2015	R2	01/01/2015 Annual review, no change in coverage, changed carrier to contractor.	<ul style="list-style-type: none"> • Other (Maintenance Annual Review)
10/01/2015	R1	03/04/2014 – Approving ICD-10 LCD policy for public viewing. (DK)	<ul style="list-style-type: none"> • Other

Associated Documents

Attachments

N/A

Related Local Coverage Documents

Articles

[A56916 - Billing and Coding: Scanning Computerized Ophthalmic Diagnostic Imaging \(SCODI\)](#)

Related National Coverage Documents

NCDs

[220.1 - Computed Tomography](#)

[80.6 - Intraocular Photography](#)

[140.5 - Laser Procedures](#)

Public Versions

UPDATED ON	EFFECTIVE DATES	STATUS
06/22/2023	06/29/2023 - N/A	Currently in Effect (This Version)
09/20/2021	09/30/2021 - 06/28/2023	Superseded

Some older versions have been archived. Please visit the MCD Archive Site to retrieve them.

Keywords

N/A