

**LCD - Corneal Pachymetry (L33999)**

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**Contractor Information**

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATES
CGS Administrators, LLC	MAC - Part A	15101 - MAC A	J - 15	Kentucky
CGS Administrators, LLC	MAC - Part B	15102 - MAC B	J - 15	Kentucky
CGS Administrators, LLC	MAC - Part A	15201 - MAC A	J - 15	Ohio
CGS Administrators, LLC	MAC - Part B	15202 - MAC B	J - 15	Ohio

**LCD Information****Document Information****LCD ID**

L33999

**LCD Title**

Corneal Pachymetry

**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 02/01/2024

**Revision Ending Date**

N/A

**Retirement Date**

N/A

**Notice Period Start Date**

N/A

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**Notice Period End Date**

N/A

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**Issue****Issue Description**

This LCD outlines limited coverage for this service with specific details under **Coverage Indications, Limitations and/or Medical Necessity**.

**CMS National Coverage Policy**

Language quoted from Centers for Medicare and Medicaid Services (CMS). National Coverage Determinations (NCDs) and coverage provisions in interpretive manuals is italicized throughout the policy. NCDs and coverage provisions in interpretive manuals are not subject to the Local Coverage Determination (LCD) Review Process (42 CFR 405.860[b] and 42 CFR 426 [Subpart D]). In addition, an administrative law judge may not review an NCD. See Section 1869(f)(1)(A)(i) of the Social Security Act.

Unless otherwise specified, *italicized* text represents quotation from one or more of the following CMS sources:

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.

Section 1862(a)(7) excludes routine physical examinations, unless otherwise covered by statute.

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

CMS Publications:

CMS Publication Pub. 100-08, *Program Integrity Manual*, Chapter 13:

13.5.1 Reasonable and Necessary Provisions in LCDs.

**Coverage Guidance****Coverage Indications, Limitations, and/or Medical Necessity****Abstract:**

Corneal Pachymetry is the measurement of corneal thickness and commonly uses either ultrasonic or optical methods. Measurement of corneal thickness in individuals presenting with increased intraocular pressure assists in determining if there is a risk of glaucoma or if the individual's increased eye pressure is the result of abnormal corneal thickness. The test must be integral to the medical management decision-making of the patient. Coverage is limited to ophthalmologists and optometrists.

**Indications and Limitations:**

Medicare will consider corneal pachymetry to be medically necessary and reasonable when performed to determine the amount of endothelial trauma sustained during surgery, assessment of the health of the cornea pre-operatively in Fuch's dystrophy, post ocular trauma and for the assessment of corneal thickness or (in suspected glaucoma) following the diagnosis of increased intraocular pressure prior to the initiation of a treatment regimen for glaucoma. It is expected that services for the measurement of corneal thickness following the diagnosis of increased intraocular pressure will be performed once in a lifetime, unless there has been interval corneal trauma or surgery.

Medicare will consider corneal pachymetry to be medically necessary and reasonable when performed only by ophthalmologist and optometrists.

Medicare will not pay for use of pachymetry when used in preparation for surgery to reshape the cornea of the eye for the purpose of correcting visual problems (refractive surgery), such as myopia (nearsightedness) and hyperopia (farsightedness).

Whether patients have been previously diagnosed and are under treatment for glaucoma or are newly diagnosed, pachymetry will be covered once per lifetime, or more frequently in cases where there has been surgical or non-surgical trauma.

When there is a question of corneal disease supported by diagnosis, then pachymetry may be performed at the same time as endothelial cell count.

#### **Other Comments:**

For claims submitted to the Part A MAC: This coverage determination also applies within states outside the primary geographic jurisdiction with facilities that have nominated CGS Administrators, LLC. to process their claims.

Bill type codes only apply to providers who bill these services to the Part A MAC. Bill type codes do not apply to physicians, other professionals and suppliers who bill these services to the carrier or Part B MAC.

Limitation of liability and refund requirements apply when denials are likely, whether based on medical necessity or other coverage reasons. The provider/supplier must notify the beneficiary in writing, prior to rendering the service, if the provider/supplier is aware that the test, item or procedure may not be covered by Medicare. The limitation of liability and refund requirements do not apply when the test, item or procedure is statutorily excluded, has no Medicare benefit category or is rendered for screening purposes.

For outpatient settings other than CORFs, references to "physicians" throughout this policy include non-physicians, such as nurse practitioners, clinical nurse specialists and physician assistants. Such non-physician practitioners, with certain exceptions, may certify, order and establish the plan of care for as authorized by State law. (See Sections 1861[s][2] and 1862[a][14] of Title XVIII of the Social Security Act; 42 CFR, Sections 410.74, 410.75, 410.76 and 419.22; 58 FR 18543, April 7, 2000.)

For dates of service on or after April 1, 2010, bill type 77X should be used to report FQHC services.

#### **Summary of Evidence**

N/A

#### **Analysis of Evidence (Rationale for Determination)**

N/A

# General Information

## Associated Information

Medical record documentation maintained by the ordering/referring physician must indicate the medical necessity for performing the test and the test results. In addition, if the service exceeds the frequency parameter listed in this policy, documentation of medical necessity must be submitted. This information is usually found in the history and physical, office/progress notes, or test results.

If the provider of the service is other than the ordering/referring physician, that provider must maintain hard copy documentation of test results and interpretation, along with copies of the ordering/referring physician's order for the studies. The physician must state the clinical indication/medical necessity for the study in his order for the test.

Documentation should contain a history and physical which supports the diagnosis for which this service is being rendered.

It is expected that these services would be performed as indicated by current medical literature and/or standards of practice. When services are performed in excess of established parameters, they may be subject to review for medical necessity.

It is expected that services for the measurement of corneal thickness following the diagnosis of increased intraocular pressure will be performed once in a lifetime, unless there has been interval corneal trauma or surgery.

## Sources of Information

This bibliography presents those sources that were obtained during the development of this policy. CGS Administrators, LLC. is not responsible for the continuing viability of Web site addresses listed below.

Albert DM, Jakobiac FA. *Principles and Practice of Ophthalmology* (2nd ed.) WB Saunders. 2000. (This reference was used to gain textbook knowledge of the cornea.)

Bohnke M, Mojon DS, Sobottka AC. Central corneal thickness measurements in patients with normal tension glaucoma, primary open angle glaucoma, pseudoexfoliation glaucoma, or ocular hypertension. *Br. J. Ophthalmology*. 2001;85:792-795.

Brandt J. Corneal thickness in glaucoma screening, diagnosis and management. *Current Opinion in Ophthalmology*. 2004;15:85-89.

Chen P, Kim J. Central corneal pachymetry and visual field progression in patients with open-angle glaucoma. *Ophthalmology*. 2004;111:2126-2132.

Herndon L, Stinnet S, Weizer J. Central corneal thickness as a risk factor for advanced glaucoma damage. *Archives of Ophthalmology*. 2004;122,:17-21.

Ho T, Cheng ACK, Rao SK, Lau S, Leung CKS, Lam DSC. Central corneal thickness measurements using Orbscan II, Visante, ultrasound, and Pentacam pachymetry after laser in situ keratomileusis for myopia. *Ophthalmology Review*. July 2007;33(7):1177-1182.

Kass MA, Heuer DK, Higginbotham EJ, et al. The ocular hypertension treatment study: A randomized trial determines that topical ocular hypotensive medication delays or prevents the onset of primary open-angle glaucoma. *Archives of Ophthalmology*. 2002;120:701-711. (This reference provided data which supported that ocular hypertension may be

the result of abnormal corneal thickness.)

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 Ophthalmology*. 2008;145(2):228-232.

Leung DY, Lam KT, Yeung BYM, Lam DSC. Comparison between corneal thickness measurements by ultrasound pachymetry and optical coherence tomography. *Clinical & Experimental Ophthalmology*. 2006;34(8):751-754.

Medeiros FA, Sample PA, Zangwill LM, Bowd C, Aihara M, Weinreb RN. Corneal thickness as a risk factor for visual field loss in patients with preperimetric glaucomatous optic neuropathy. *American Journal of Ophthalmology*. 2003;136:805-813.

Nemures B, Wu S, Hennis A, Leske CM. Corneal thickness and intraocular pressure in the Barbadoes eye studies. *Archives of Ophthalmology*. 2003;121:240-244. (This reference provided information regarding subjects determined to have increased corneal thickness and its relationship to increased ocular pressure.)

Shih C, Trokel S, Tsai J, Zivin J. Clinical significance of central corneal thickness in the management of glaucoma: *Archives of Ophthalmology*. 2004;122:1270-1275.

Wang J, Fonn D, Simpson TL, Jones L. Relation between optical coherence tomography and optical pachymetry measurements of corneal swelling induced by hypoxia. *Am J Ophthalmology*. 2002;134(1):93-98.

## Bibliography

N/A

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# Revision History Information

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
02/01/2024	R12	R12  Revision Effective: 02/01/2024  Revision Explanation: Annual review, no changes were made.  <i>01/25/2024: 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.</i>	<ul style="list-style-type: none"><li>Other (Annual Review)</li></ul>
01/26/2023	R11	R11  Revision Effective: 01/26/2023	<ul style="list-style-type: none"><li>Other (Annual Review)</li></ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
		<p>Revision Explanation: Annual review, no changes were made.</p> <p>01/20/2023: <i>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.</i></p>	
02/03/2022	R10	<p>R10</p> <p>Revision Effective: 02/03/2021</p> <p>Revision Explanation: Annual review, no changes were made.</p> <p>01/25/2022: <i>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.</i></p>	<ul style="list-style-type: none"> <li>Other (Annual Review)</li> </ul>
01/28/2021	R9	<p>R9</p> <p>Revision Effective: 01/28/2021</p> <p>Revision Explanation: Removed typographical error from Associated Information section</p> <p>1-22-21: <i>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.</i></p>	<ul style="list-style-type: none"> <li>Other (Annual Review)</li> </ul>
09/19/2019	R8	<p>R8</p> <p>Revision Effective: N/A</p> <p>Revision Explanation: Annual review, no changes</p> <p>1-28-20: <i>At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires</i></p>	<ul style="list-style-type: none"> <li>Other (Annual Review)</li> </ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
		<p><i>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.</i></p>	
09/19/2019	R7	<p>R7</p> <p>Revision Effective: 09/19/2019 Revision Explanation: Converted policy into new policy template that no longer includes coding section based on CR 10901. For Approval, no changes.</p> <p>09/13/2019: <i>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.</i></p>	<ul style="list-style-type: none"> <li>• Revisions Due To Code Removal</li> </ul>
09/19/2019	R6	<p>R6</p> <p>Revision Effective: 09/19/2019 Revision Explanation: Converted policy into new policy template that no longer includes coding section based on CR 10901.</p> <p>09/12/2019: <i>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.</i></p>	<ul style="list-style-type: none"> <li>• Revisions Due To Code Removal</li> </ul>
04/04/2019	R5	<p>R5</p> <p>Revision Effective: 04/04/2019</p> <p>Revision Explanation: Removed all billing and coding details from policy into related Billing and Coding article. Coding information was removed based on CR10901. Also, retired A52383-Corneal Pachymetry-Supplemental Instructions Article.</p> <p>03/28/2019: <i>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.</i></p>	<ul style="list-style-type: none"> <li>• Other (Removed billing and coding details )</li> </ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASONS FOR CHANGE
10/01/2016	R4	<p>R4</p> <p>Revision Effective: N/A</p> <p>Revision Explanation: Annual review no changes made.</p> <p>01/28/2019: <i>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.</i></p>	<ul style="list-style-type: none"> <li>Other (Annual Review)</li> </ul>
10/01/2016	R3	<p>R3</p> <p>Revision Effective: N/A</p> <p>Revision Explanation: Annual review no changes made.</p> <p>01/30/2018: <i>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.</i></p>	<ul style="list-style-type: none"> <li>Other (Annual Review)</li> </ul>
10/01/2016	R2	<p>R2</p> <p>Revision Effective: 10/01/2016</p> <p>Revision Explanation: During ICD-10 annual review codes H40.11X1-H40.11X4 were deleted and replaced with H40.1111-H40.1114, H40.1121-H40.1124, and H40.1131-H40.1134.</p>	<ul style="list-style-type: none"> <li>Revisions Due To ICD-10-CM Code Changes</li> </ul>
10/01/2015	R1	<p>R1</p> <p>Revision Effective: N/A</p> <p>Revision Explanation: Annual review no changes made.</p>	<ul style="list-style-type: none"> <li>Other (Annual review)</li> </ul>

## Associated Documents

### Attachments

N/A

### Related Local Coverage Documents

### Articles

[A56457 - Billing and Coding: Corneal Pachymetry](#)

### Related National Coverage Documents

N/A



## Public Versions

UPDATED ON	EFFECTIVE DATES	STATUS
01/25/2024	02/01/2024 - N/A	Currently in Effect (This Version)
01/20/2023	01/26/2023 - 01/31/2024	Superseded

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

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## Keywords

N/A