

# Local Coverage Determination (LCD): Computerized Corneal Topography (L33810)

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## Contractor Information

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATE(S)
First Coast Service Options, Inc.	A and B MAC	09102 - MAC B	J - N	Florida
First Coast Service Options, Inc.	A and B MAC	09202 - MAC B	J - N	Puerto Rico
First Coast Service Options, Inc.	A and B MAC	09302 - MAC B	J - N	Virgin Islands

## LCD Information

### Document Information

<b>LCD ID</b> L33810	<b>Original Effective Date</b> For services performed on or after 10/01/2015
<b>LCD Title</b> Computerized Corneal Topography	<b>Revision Effective Date</b> For services performed on or after 01/08/2019
<b>Proposed LCD in Comment Period</b> N/A	<b>Revision Ending Date</b> N/A
<b>Source Proposed LCD</b> N/A	<b>Retirement Date</b> N/A
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	<b>Notice Period End Date</b> N/A

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## **CMS National Coverage Policy**

This LCD supplements but does not replace, modify or supersede existing Medicare applicable National Coverage Determinations (NCDs) or payment policy rules and regulations for Computerized Corneal Topography. Federal statute and subsequent Medicare regulations regarding provision and payment for medical services are lengthy. They are not repeated in this LCD. Neither Medicare payment policy rules nor this LCD replace, modify or supersede applicable state statutes regarding medical practice or other health practice professions acts, definitions and/or scopes of practice. All providers who report services for Medicare payment must fully understand and follow all existing laws, regulations and rules for Medicare payment for Computerized Corneal Topography and must properly submit only valid claims for them. Please review and understand them and apply the medical necessity provisions in the policy within the context of the manual rules. Relevant CMS manual instructions and policies may be found in the following Internet-Only Manuals (IOMs) published on the CMS Web site.

### **Internet Only Manual (IOM) Citations:**

- CMS IOM Publication 100-02, *Medicare Benefit Policy Manual*,
  - Chapter 15, Section 80 Requirements for Diagnostic X-Ray, Diagnostic Laboratory, and Other Diagnostic Tests
- CMS IOM Publication 100-03, *Medicare National Coverage Determinations (NCD) Manual*,
  - Chapter 1, Part 1, Section 80.7 Refractive Keratoplasty, Section 80.7.1 Keratoplasty
- CMS IOM Publication 100-08, *Medicare Program Integrity Manual*,
  - Chapter 13, Section 13.5.4 Reasonable and Necessary Provision in an LCD

### **Social Security Act (Title XVIII) Standard References:**

- Title XVIII of the Social Security Act, Section 1862(a)(1)(A) states that no Medicare payment shall be made for items or services which are not reasonable and necessary for the diagnosis or treatment of illness or injury.
- Title XVIII of the Social Security Act, Section 1862(a)(7). This section excludes routine physical examinations.
- Title XVIII of the Social Security Act, Section 1833(e) states that no payment shall be made to any provider for any claim that lacks the necessary information to process the claim.

## **Federal Register References:**

- Code of Federal Regulations (CFR), Title 42, Volume 2, Chapter IV, Part 410.32 Diagnostic x-ray tests, diagnostic laboratory tests, and other diagnostic tests: Conditions.

## **Coverage Guidance**

### **Coverage Indications, Limitations, and/or Medical Necessity**

### **History/Background and/or General Information**

Computerized Corneal Topography (also known as computer-assisted video keratography [CAVK]) and corneal mapping is a computer assisted diagnostic imaging technique in which a special instrument projects a series of light rings on the cornea, creating a color coded map of the corneal surface as well as a cross-section profile. This service is used to provide a detailed map or chart of the physical features and shape of the anterior surface of the cornea. This permits a more accurate portrayal of the physical state of the cornea and the subtle detection of corneal surface irregularity and astigmatism.

Please refer to CMS IOM Publication 100-03, *Medicare National Coverage Determinations (NCD) Manual*, Chapter 1, Part 1, Section 80.7 and Section 80.7.1 for guidelines regarding keratoplasty.

### **Covered Indications**

Computerized Corneal Topography will be considered medically necessary under any of the following conditions:

- pre-operatively for evaluation of irregular astigmatism prior to cataract surgery
- monocular diplopia
- bullous keratopathy
- post surgical or post traumatic astigmatism, measuring at a minimum of 3.5 diopters;
- post penetrating keratoplasty surgery;
- post surgical or post traumatic irregular astigmatism;
- corneal dystrophy;
- complications of transplanted cornea;
- post traumatic corneal scarring;
- keratoconus; and/or
- pterygium and/or corneal ectasia that cause visual impairment.

### **Limitations**

Corneal topography will only be allowed for a pre-operative cataract patient if documentation supports that the patient has irregular astigmatism.

Corneal topography is to be billed only when the diagnosis of monocular diplopia is thought to be caused by a corneal irregularity.

Corneal topography is a covered service for the above indications when medically reasonable and necessary only if the results will assist in defining further treatment. It is not covered for routine follow-up testing.

Repeat testing is only indicated if a change of vision is reported in connection with one of the above listed conditions.

Services performed for screening purposes or in the absence of associated signs, symptoms, illness or injury as indicated above, will be denied as non-covered.

Corneal topography will be non-covered if performed pre- or post-operatively in relation to a non-covered procedure, i.e., radial keratotomy.

As published in the CMS IOM Publication 100-08, *Medicare Program Integrity Manual*, Chapter 13, Section 13.5.4, an item or service may be covered by a contractor LCD if it is reasonable and necessary under the Social Security Act Section 1862 (a)(1)(A). Contractors shall determine and describe the circumstances under which the item or service is considered reasonable and necessary.

### **Summary of Evidence**

N/A

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

N/A

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## **General Information**

### **Associated Information**

### **Documentation Requirements**

Please refer to the Local Coverage Article: Billing and Coding: Computerized Corneal Topography (A57699) for documentation requirements that apply to the reasonable and necessary provisions outlined in this LCD.

### **Utilization Guidelines**

Please refer to the Local Coverage Article: Billing and Coding: Computerized Corneal Topography (A57699) for utilization guidelines that apply to the reasonable and necessary provisions outlined in this LCD.

### **Sources of Information**

First Coast Service Options, Inc. reference LCD number – L29140

American Academy of Ophthalmology. (2006). *Preferred Practice Pattern for Cataract in the Adult Eye*.

Fedor, . (2006). Corneal Topography and Imaging.

Rasheed, K. (2005). Pellucid Marginal degeneration.

Szczotka, L. (2003). Corneal topography and contact lenses. *Ophthalmology Clinics of North America* 16(3). W.B. Saunders Company

Verdler, D. (2005). Dystrophy, Map-dot-fingerprint.

Wang, L.; Koch, D. (2005). Corneal Topography and its Intergration into Refractive Surgery. *Comprehensive Ophthalmology Update* 6 (2) pp73-81.

Weissman, B. (2007). Keratoconus.

## Bibliography

N/A

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# Revision History Information

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASON(S) FOR CHANGE
01/08/2019	R5	<p>Revision Number: 4 Publication: November 2019 Connection LCR B2019-031</p> <p>Explanation of Revision: Based on Change Request (CR) 10901, the LCD was revised to remove all billing and coding and all language not related to reasonable and necessary provisions ("Bill Type Codes," "Revenue Codes," "CPT/HCPCS Codes," "ICD-10 Codes that Support Medical Necessity," "Documentation Requirements" and "Utilization Guidelines" sections of the LCD) and place them into a newly created billing and coding article. During the process of moving the ICD-10-CM diagnosis codes to the billing and coding article, the ICD-10-CM diagnosis code ranges were broken out and listed individually. In addition, the Social Security Act, Code of Federal Regulations, and IOM reference sections were updated. The effective date of this revision is for claims processed on or after January 8, 2019, for dates of service on or after October 3, 2018.</p> <p>At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires comment</p>	<ul style="list-style-type: none"><li>Other (Revision based on CR 10901)</li></ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASON(S) FOR CHANGE
		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 LCD.	
02/08/2018	R4	<p>Revision Number: 3</p> <p>Publication: February 2018 Connection</p> <p>LCR B2018-003</p> <p>Explanation of Revision: This LCD was revised in the "ICD-10 Codes that Support Medical Necessity" section of the LCD under "Group 1 Medical Necessity ICD-10 Codes Asterisk Explanation:" to include an explanation that all the codes within the asterisked range from the first code to the last code apply. The effective date of this revision is based on process date.</p> <p>02/08/2018: 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.</p>	<ul style="list-style-type: none"> <li>• Provider Education/Guidance</li> <li>• Public Education/Guidance</li> </ul>
08/08/2016	R3	<p>Revision Number: 2</p> <p>Publication: August 2016 Connection</p> <p>LCR B2016-015</p> <p>Explanation of revision: The LCD was revised to add ICD-10-CM diagnosis codes H18.51, H18.52, H18.53, H18.54 and H18.55 and diagnosis range H11.811-H11.819 to the "ICD-10 Codes that Support Medical Necessity" section of the LCD. The effective date of this revision is for claims processed on or after 08/08/2016, for dates of service on or after 10/01/15.</p>	<ul style="list-style-type: none"> <li>• Revisions Due To ICD-10-CM Code Changes</li> </ul>
08/08/2016	R2	<p>Revision Number: 2</p> <p>Publication: August 2016 Connection</p> <p>LCR B2016-015</p> <p>Explanation of revision: The LCD was revised to add ICD-10-CM diagnosis codes H18.51, H18.52, H18.53, H18.54 and H18.55 and diagnosis range H11.811-H11.819 to the "ICD-10</p>	<ul style="list-style-type: none"> <li>• Revisions Due To ICD-10-CM Code Changes</li> </ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASON(S) FOR CHANGE
		Codes that Support Medical Necessity” section of the LCD. The effective date of this revision is for claims processed on or after 08/08/2016, for dates of service on or after 10/01/15.	
02/24/2016	R1	Revision Number: 1 Publication: March 2016 Connection LCR B2016-008  Explanation of revision: LCD revised to add additional ICD-10-CM diagnosis code T86.848 to the “ICD-10 Codes that Support Medical Necessity” section of the LCD. The effective date of this revision is for claims processed on or after 02/24/2016, for dates of service on or after 10/01/15.	<ul style="list-style-type: none"> <li>Revisions Due To ICD-10-CM Code Changes</li> </ul>

## Associated Documents

### Attachments

N/A

### Related Local Coverage Documents

Article(s)

A57699 - Billing and Coding: Computerized Corneal Topography

### Related National Coverage Documents

N/A

### Public Version(s)

Updated on 11/22/2019 with effective dates 01/08/2019 - N/A

Updated on 02/02/2018 with effective dates 02/08/2018 - 01/07/2019

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

## Keywords

N/A