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A Division of Ardare Corporation

Reimbursement for Diagnostic Tests with the Carl Zeiss Meditec Atlas 9000 Topography System

Prepared for

ZEISS

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by

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Objective: *This report is provided as a general discussion of billing and documentation for diagnostic tests performed with the Carl Zeiss Meditec Atlas 9000 Topography System and is for informational purposes only. Variations in coverage and payment policies among Medicare Administrative Contractors (MACs) may occur which are not described here. Other non-Medicare payers may promulgate policies that differ from those of Medicare and its contractors. The user is strongly encouraged to review federal and state laws, regulations, code sets (including ICD-10), and official instructions of the Centers for Medicare & Medicaid Services (CMS), the MACs, and other third party payers.*

Notice: *All fee schedule amounts noted in this document are the national Medicare allowed amounts. Actual fee schedule amounts and payments vary by locality.*

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Acknowledgement: *This paper was underwritten by a grant from Carl Zeiss Meditec as an aid to customers and other interested parties. Carl Zeiss Meditec is not the author of, and therefore not responsible for, the content of the reimbursement and billing information provided herein. A number of individuals provided helpful suggestions for which we are grateful. For further information about their products, contact the company at www.zeiss.com/med.*

INTRODUCTION

This monograph describes reimbursement for diagnostic tests performed with the ZEISS Atlas 9000 Corneal Topography system, either alone or as part of another service.

Much of the information in this document is taken from official publications of the Medicare program. The reader is encouraged to check with the local Medicare Administrative Contractor (MAC) for additional information and instructions. In the case of other third party payers, we have used the coding concepts contained in Current Procedural Terminology (CPT) and published by the American Medical Association (AMA); diagnosis codes are from the International Classification of Diseases (ICD), ICD-10-CM (10th edition). Documentation of a diagnostic test, and the medical rationale for it, are key to reimbursement so we describe the required elements in detail.

Since economic analyses are a necessary part of any capital budgeting decision, we incorporated Medicare's payment rates for the procedure as well as utilization rates.

THE INSTRUMENT

The ZEISS Atlas 9000 Corneal Topography System[1] is a multipurpose diagnostic instrument for evaluating the cornea and parts of the anterior segment and pupil utilizing corneal topography and other imaging. The instrument can perform multiple tests depending on the patient's and provider's needs. These tests include:

- Corneal curvature, topography, and simulated keratometry
- Horizontal Visible Iris Diameter (HVID) measurement ("White to White") for IOL calculation and Contact lens fitting applications
- Pupillometry in both scotopic and photopic conditions
- Corneal aberrometry

The Atlas 9000 Corneal Topography System also has some additional add-on software options in addition to all the above which are standard:

- Pathfinder™ II Corneal Analysis software, which includes:
    - Suspect/Clinical keratoconus
    - Myopic and Hyperopic laser vision correction
    - Other non-normal corneal conditions (keratoplasty)

[1] All information presented in this section about the instrument is courtesy of Carl Zeiss Meditec.

    - Color-coding of parameters that are beyond normal limits compared to an independent data set
    - Track corneal changes over time to monitor changes in probability
- MasterFit™ II Contact Lens software, which includes:
    - Simulated rigid gas-permeable (RGP) fluorescein patterns, including spherical, toric, and aspheric designs
    - Ability to perform lens design based on desired tear film clearance
    - Simulation of RGP lens adjustment such as peripheral curves prior to re-order of lenses
    - Ability to download electronic parameters for sending lens design and topography digitally to the contact lens laboratory or manufacturer
- ATLAS™ Review Software
    - Remote access to corneal topography exam data
    - Remote patient education tools such as corneal wavefront simulation
- Wave Contact lens software
- DICOM Gateway

All of these tests potentially supplement the eye care professional's evaluation and management of the cornea and anterior segment and may assist in planning for contact lenses and anterior segment surgery. The Atlas 9000 Corneal Topography System provides a comfortable 70 mm working distance from the cornea.

Figure 1 **ZEISS Atlas Corneal Topographer (Operator view)**

Image Courtesy of ZEISS

Figure 2 **ZEISS Atlas Corneal Topographer (Patient / Placido Ring view)**

Image Courtesy of ZEISS

The measurements available, their ranges, and other important information are shown in Table 1. Figures 3A-3D show a variety of displays for images that can be generated and displayed by the Atlas 9000. (Images courtesy of ZEISS.)

Table 1 **Atlas 9000 Features**[2]

Test Type	**Data and Features**

Corneal Topography	• 22 Placido rings (18 superiorly, 22 inferiorly)
	• Image capture rate:
	  ○ 15 digital images / second
	• Range:
	  ○ 15 D to 95 D corneal curvature
	  ○ 0.05 D accuracy
	  ○ 0.10 D reproducibility
	• Infrared (950 nm) LED light source
	• Cone of Focus™ Alignment System and Arc-Step algorithm said to ensure sub-micron elevation accuracy
	• Views:
	  ○ Axial curvature
	  ○ Tangential curvature
	  ○ Elevation (via Best-fit sphere)

[2] Zeiss.com/med. Products and Solutions. Ophthalmology-Optometry. Cornea-refractive. Atlas 9000. Link here. Accessed 08/28/17.

Table 1 **Atlas 9000 Features**[2]

Test Type	Data and Features
	○ Irregularity (via Best-fit ellipsoid) ○ Videokeratoscopic (Rings, Scotopic, Photopic) ○ Keratometry ○ Refractive power (cornea) ○ Mean curvature ○ Corneal wavefront analysis ▪ Simulated image of Snellen Acuity (based on cornea) ▪ Point-Spread function (PSF) ▪ Modulation transfer function (MTF) • Presentation (Results and Display): ○ Integrated 12.1" Color flat panel display ○ Single View, Overview, OD/OS comparison, Difference, Trend with time, Trend analysis, and Custom
Pupillometry	• Scotopic and photopic measurement • Range: 0.5 mm to 11.0 mm • 0.1 mm resolution • 700 nm light source
Horizontal Visible Iris Diameter (HVID, aka "White to White")	• Range: 10.0 mm to 14.0 mm • 0.1 mm resolution

Figure 3A **Atlas 9000 Axial and Mean Curvature**

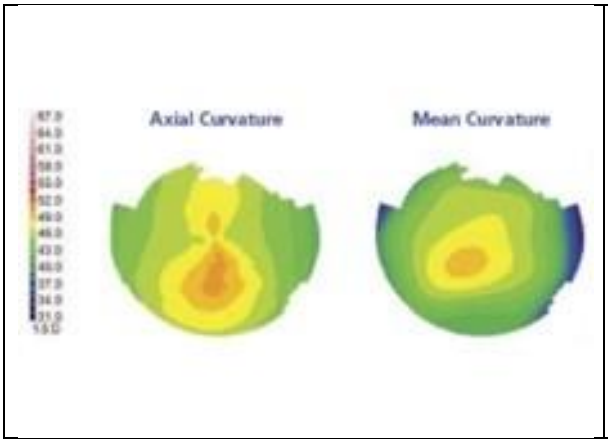

Figure 3B **Atlas 9000 Corneal Wavefront Analysis, Overview**

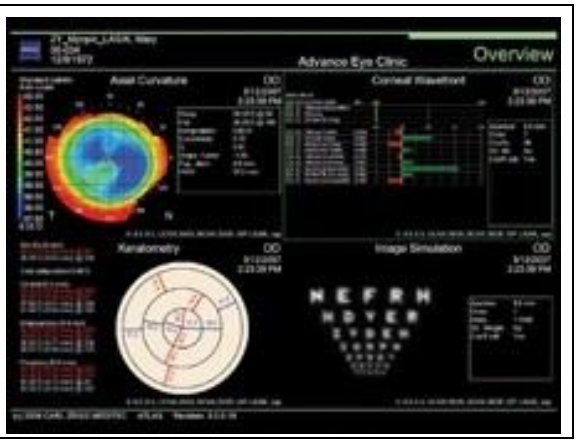

Figure 3C **Atlas 9000 Pupillometry (Photopic R, Scotopic L)**

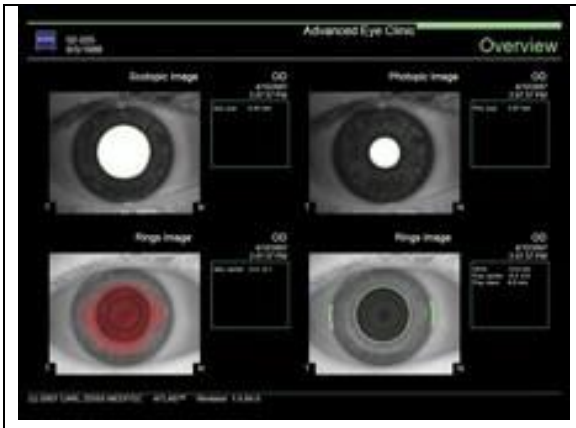

Figure 3D **Atlas 9000 White-to-White (Horizontal Visible Iris Diameter, HVID)**

INDICATIONS

Corneal topography (CT) is used for the diagnosis and management of corneal disease, disorders, abnormalities, or injury. It is helpful as an adjunct to contact lens fitting, particularly in difficult cases such as keratoconus, post-refractive surgery, and after anterior or penetrating keratoplasty. Prior to refractive surgery, CT is an important test that helps the surgeon plan the procedure. Following corneal surgery, CT is invaluable for postoperative management, including planning surgical enhancement, wound revision and suture removal.

CT is also valuable prior to cataract surgery and concurrent refractive surgery, such as keratotomy (*e.g.*, limbal relaxing incisions) or keratoplasty. In the case where the surgeon plans to insert a toric intraocular lens (IOL), CT may help determine the proper alignment for the lens to properly reduce the astigmatism.

Not all indications are covered by Medicare or other third-party payers. As of this writing, only two Medicare Administrative Contractors (MACs), CGS Administrators, LLC (CGS) and First Coast Service Options, Inc. (FCSO), have published policies which contain indications for CT as well as lists of covered diagnoses.[3,4] The list of covered diagnoses may not be the same between MACs or other third-party payers. Table 2 contains a listing of the common diagnosis codes encountered.

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[3] CGS Administrators, LLC. Local Coverage Determination on Computerized Corneal Topography. LCD# L34008, revision (R2) effective 10/01/2015. Link here. Accessed 08/28/17.

[4] First Coast Service Options, Inc. Local Coverage Determination on Computerized Corneal Topography. LCD # L33810, revision (R3) effective 08/08/2016. Link here. Accessed 08/28/17.

CGS notes the following under the "Indications" section of the policy:

> *Computerized corneal topography is considered medically necessary under any of the following conditions:*
> - *pre-operative evaluation of irregular astigmatism for intraocular lens power determination with cataract surgery;*
> - *monocular diplopia;*
> - *diagnosis of early keratoconus;*
> - *post-surgical or post-traumatic astigmatism, measuring at a minimum of 3.5 diopters;*
> - *suspected irregular astigmatism based on retinoscopic streak or conventional keratometry;*
> - *post-penetrating keratoplasty surgery;*
> - *post-surgical or post-traumatic irregular astigmatism;*
> - *certain corneal dystrophies;*
> - *complications of transplanted cornea;*
> - *post-traumatic corneal scarring; and/or*
> - *pterygium and/or corneal ectasia that cause visual impairment.*

CGS also notes under the "Limitations" and "Associated Information" sections of their policy, the following:

- *Corneal topography will only be allowed for a pre-operative cataract patient if documentation supports that the patient has irregular astigmatism. Its use for this purpose should be rare.*
- *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 Medicare non-covered procedure, e.g., radial keratotomy.*
- *Corneal topography should not be reported with or during the post-operative period for corneal procedures, e.g., 65710, 65730, 65750, 65755, 65756, 65757 and 65770.*

FCSO's policy has Indications that are nearly identical.

Table 2 Common **Diagnosis Codes for Corneal Topography** [5]

ICD-10	Description
H11.0-	Pterygium
H16.05-	Mooren's corneal ulcer
H16.3-	Interstitial keratitis
H16.33-	Sclerosing keratitis
H17.9	Corneal scar and opacity, unspecified
H18.42-	Band keratopathy
H18.45-	Nodular corneal degeneration
H18.5-	Corneal dystrophies
H18.59	Other hereditary corneal dystrophies
H18.60-	Keratoconus, unspecified
H18.61-	Keratoconus, stable
H18.62-	Keratoconus, unstable
H18.71-	Corneal ectasia
H52.21-	Irregular astigmatism
H53.2	Diplopia
T85.21X-	Breakdown (mechanical) of IOL
T85.22X-	Mechanical complication due to ocular lens prosthesis
T85.318-	Breakdown (mechanical) of other ocular prosthetic devices, implants, and grafts
T85.328-	Displacement of other ocular prosthetic devices, implants, and grafts
T86.840	Corneal transplant rejection
T86.841	Corneal transplant failure
T86.848	Other complications of corneal transplant
Z94.7	Corneal transplant status

Pupillometry

This feature measures pupil reaction to light and glare. A sample image is shown in Figure 3C. It is useful as a patient education tool and may have other clinical uses as well. It is most often listed as a noncovered service so no diagnosis code list applies.

[5] Listed codes are representative of covered diagnoses but differences in payment policies exist for many carriers. The ICD-10 codes shown may contain laterality and other issues; the ending "dash" means a longer code is required and contains greater specificity. This list is neither exhaustive nor universally accepted.

DOCUMENTATION

The Medicare guidelines for interpretation of diagnostic tests are discussed in the Medicare Claims Process Manual (MCPM) Chapter 13 §100, Interpretation of Diagnostic Tests.[6]

For any diagnostic test to be covered by Medicare or other insurance, it must meet the following criteria.

- An order for the test, with medical rationale
- The date of the test
- Reliability of the test
- Images or displays from the test
- Documentation of the effect of the test on the treatment of the patient
- Physician's signature and date

For corneal topography, the interpretation might read as follows.

- *Physician's order* – CT OU to evaluate increased blur and discomfort OD > OS with rigid corneal contact lenses, possibly related to worsening keratoconus
- July 25, 2017
- Technician: Mary Jones, COT
- Good patient cooperation
- Irregular astigmatism consistent with advancing keratoconus, worsening OD > OS
- Proceed with medically necessary scleral contact lens fitting
- *Signed: I. C. Better, O.D.*

Within an electronic medical record, we often find designated but potentially separate spots to store the CT image and CT interpretation. FCSO, in their LCD, notes the following in the "Documentation Requirements" of their policy: [7]

> *Medical record documentation submitted by the ordering/referring physician must indicate the medical necessity for performing the procedure and the results derived from the corneal topography procedure. This information is usually found in the history and physical,*

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[6] Medicare Claims Process Manual (MCPM), Chapter 13, §100. Interpretation of Diagnostic Tests. Link here. Accessed 08/28/17.

[7] First Coast Service Options, Inc. Local Coverage Determination on Computerized Corneal Topography. LCD # L33810, revision (R3) effective 08/08/2016. Link here. Accessed 08/28/17.

office/progress notes and the computerized corneal topography imaging interpretation and report.

Timing

Ideally, the interpretation of a test follows immediately after the technical component is finished. In practice, there may be a delay; however, the delay should not be lengthy or affect patient care. Since the physician need not be present during the performance of the test, the interpretation might take place the next day. If a weekend intervenes, there may be two or three days' delay.

Payment Considerations

In the Medicare Physician Fee Schedule, different payment rates are established for the professional and technical components of a diagnostic test where there is discrete reimbursement for an "interpretation and report", as there is with CT. Respectively, modifiers 26 and TC are used to make the distinction between the professional and technical portions of the test. As a practical matter, this segregation permits a technician or medical assistant to perform the technical component, with appropriate supervision; however, only the physician can interpret test results. When modifiers TC and 26 are not appended to a CPT code, then the payer understands that reimbursement is sought for both the technical and professional components together in a single payment.

As noted above, interpretation of CT includes recording the effect of the test on patient care and filing the results in the medical record (paper or electronic).

SUPERVISION

Medicare's supervision rules for many ophthalmic diagnostic tests have been stable since July 1, 2001. At this time, no supervision policy has been established for 92025 or 0341T. In our opinion, *general* supervision is appropriate for each test. This means the procedure/test is furnished under the physician's overall direction and control, but the physician's presence is not required during performance of the test.

Under general supervision rules, the training of the non-physician personnel who actually perform the diagnostic test and the maintenance of the necessary equipment and supplies are the continuing responsibility of the physician.[8] This means the procedure is furnished

[8] 42 CFR 410.32 (b)(3)(i). Definition of general supervision. Link here. Accessed 08/28/17.

under the physician's overall direction and control, but the physician's presence in the office is not required during performance of the test.

BILLING ISSUES

CPT Codes

CPT 92025 is defined as: "*Computerized corneal topography, unilateral or bilateral, with interpretation and report*".

CPT Category III code 0341T (*Quantitative pupillometry with interpretation and report, unilateral or bilateral*) is used to report pupillometry. The CPT code became effective on January 1, 2015.

Modifiers

The following modifiers may be applicable on claims for tests performed with the Atlas 9000.

26 …….	Professional component of a diagnostic test
52 ……..	Reduced services (unilateral measurement of bilateral test), use only if payer requires
AQ ……..……	Services provided in a HPSA (*Medicare modifier only; replaces QB and QU*)
GA …….....	Waiver of liability statement issued as required by payer policy (signed ABN on file)
GX …….	Notice of liability issued, voluntary under payer policy (signed ABN on file)
GY ……..……	Item or service statutorily excluded or does not meet the definition of any Medicare benefit or, for non-Medicare insurers, is not a contract benefit
GZ ……..…	Medicare probably does not cover this service. No ABN on file (*Medicare modifier only*)
RT or LT ……...	Right or left eye
TC ……..……	Technical component of a diagnostic test

Coding

Corneal topography may be billed using a *global code* (CPT 92025) without modifiers or with modifiers RT or LT as appropriate. Under some circumstances, it may be appropriate to separate the claim into two lines with modifiers TC and 26, although this will be rare.

Pupillometry is coded with Category III CPT code 0341T as noted above. Because it is a category III code, there are no standard instructions concerning the use of modifiers. In addition, coverage and payment are at MAC discretion, although it is most often noncovered and therefore a patient-pay service.

Sample Claim

You have been following a 32 y/o female patient over a number of years for advancing keratoconus OU. She has noticed a dramatic decrease in vision in the right eye over the past few months, even with her contact lenses; the acuity in the left eye is also worse, although not as bad. You order corneal topography to see if the keratoconus is changing – and note that it has worsened OD>OS. In addition to the exam (shown as 9xxxx), the claim will read as shown.

17 REFERRING/ORDERING PROVIDER	17a.		
DK J Emdy MD	17b.	NPI	1234567890
19 ADDITIONAL CLAIM INFORMATION			
21 DIAGNOSIS OR NATURE OF ILLNESS OR INJURY ICD Ind. 0			
A. H18.623 B. H52.213 C. D.			

24. A. DATES OF SERVICE From MM DD YY	To MM DD YY	B. POS	C. EMG	D. PROCEDURES, SVCS CPT/HCPCS	MODIFIER	E. DX POINTER	F. $ CHARGES	G. UNITS	H. EPSDT	I. ID QUAL.	J. RENDERING PROVIDER I.D.
mm dd yyyy		11		9xxxx		A, B	xxx xx	1		NPI	1234567890
mm dd yyyy		11		92025		A, B	xxx xx	1		NPI	1234567890

Multiple Procedure Payment Reduction

Medicare has implemented a payment reduction when multiple tests are performed at the same encounter. Known as the Multiple Procedure Payment Reduction (MPPR),[9] it is effective for dates of service beginning January 1, 2013. This payment policy reduces the *technical component* of the second and any subsequent ophthalmic diagnostic tests by

[9] CMS. Medicare Learning Network, MLN Matters MM7848, Eff. January 1, 2013. Link here. Accessed 08/28/17.

20% when more than one eligible diagnostic test is performed at one patient encounter on the same day by the same physician or group. The list of tests[10] includes ultrasounds, imaging, and visual fields. Tests not on the list are not subject to the MPPR reduction. Corneal topography is subject to MPPR.

MPPR Example

A patient returns for her 6 month glaucoma and cornea check; an OCT of the optic nerve head was ordered at the last visit for performance today. During the exam today, you note that the vision in each eye has worsened and the OCT results indicates the glaucoma is not the cause; on refraction you note a scissored reflex indicative of keratoconus, OU. CT is ordered and performed today. Both tests are properly interpreted. In 2017, Medicare payment for these two tests when done in the office would be as follows.

Test	Professional	Technical (showing reduction)	Total Payment
92025, Corneal topography	$20.46	$17.94 (No reduction)	$38.40
92133 SCODI-P (Optic Nerve head OCT)	$22.97	$15.07 less $3.02 (20%) = $12.05	$35.02

2017 National Medicare Physician Fee Schedule, PAR allowable

The payment reduction is taken only on the lesser of the two *technical* portions – which is the OCT in this example. The professional component of the CT is lower than the OCT - but professional services are unaffected by MPPR and paid in full for each test.

Financial Waivers

An Advance Beneficiary Notice of Non-Coverage (ABN, CMS-R-131)[11] is a written notice a health care provider gives to a Medicare beneficiary when the provider believes that Medicare will not pay for items or services. It applies to both assigned and non-assigned claims. By signing an ABN, the Medicare beneficiary acknowledges that he or she has been advised that Medicare will not pay and agrees to be responsible for payment, either personally or through another insurance plan. For an ABN to have any utility, it must be signed before providing the item or service.

The format of an ABN cannot be modified to any significant degree. You must add your name, address and telephone to the header. You may add your logo and other

[10] CMS Transmittal 1149, dated November 6, 2012, identifies the specific tests by CPT code that are subject to the MPPR. The Medicare Physician Fee Schedule multiple procedure indicator also identifies these codes each year (multiple procedure indicator 7). Link here. Accessed 08/28/17.

[11] Advance Beneficiary Notice of Noncoverage. Link here. Accessed 08/28/17.

information if you wish. The "Items or Services," "Reason Medicare May Not Pay," and "Estimated Cost" boxes are customizable so you can add pre-printed lists of common items and services or denial reasons. Anything you add in the boxes must be high contrast ink on a pale background. Blue or black ink on white paper is preferred. You may not make any other alterations to the form. It must be one page, single-sided, although an addendum is allowed.

The patient must *sign* and *date* the form; an unsigned or undated form is not valid. Once the patient has signed the completed form, he or she must receive a legible copy. The same guidelines apply to the copy as to the original: blue or black ink on white paper is preferred; a photocopy is fine. You keep the original in your files.

You must complete your portion of the form before asking the beneficiary to sign. Fill in the beneficiary's name and identification number (but not HIC number) at the top of the form. Complete the "Items or Services" box, describing what you propose to provide. Use simple language the beneficiary can understand. You may add CPT or HCPCS codes, but codes alone are not sufficient without a description. Complete the "Reason Medicare May Not Pay" box with the reason(s) you expect a denial. The reason(s) must be specific to the particular patient; general statements such as "medically unnecessary" are not acceptable. The "Estimated Cost" field is required.

The beneficiary must *personally* choose from Option 1, 2 or 3.

- Option 1 *I want the items or services listed above. You may ask to be paid now, but I also want Medicare billed for an official decision on payment, which is sent to me on a Medicare Summary Notice (MSN). I understand that if Medicare doesn't pay, I am responsible for payment, but* ***I can appeal to Medicare*** *by following the directions on the MSN. If Medicare does pay, you will refund any payments I made to you, less co-pays or deductibles.*
- Option 2 *I want the items or services listed above, but do not bill Medicare. You may ask to be paid now as I am responsible for payment, and* ***I cannot appeal if Medicare is not billed.***
- Option 3 *I don't want the items or services listed above. I understand with this choice I am* ***not*** *responsible for payment, and* ***I cannot appeal to see if Medicare would pay.***

If the beneficiary chooses Option 1, you must file a claim and append an appropriate modifier to the reported item(s) or service(s). Option 2 applies to situations where Medicare is precluded from paying for the item or service and the beneficiary does not dispute the point; you are not required to file a claim. If the beneficiary chooses Option 3, there is no claim to file or charge to make; the service is not provided because the patient declines.

You do not need an ABN for items or services that are statutorily (*i.e.*, by law) non-covered by Medicare. Statutorily non-covered services in an eye care practice include refractions and cosmetic procedures such as refractive surgery. Instructions, published on September 5, 2008,[12] allow the use of an ABN *voluntarily* for items excluded from Medicare coverage. At your discretion, you may choose to notify a beneficiary that these services are never covered using the ABN. Written notification is strongly recommended to avoid confrontations with beneficiaries about payment.

In CMS Transmittal R1921CP,[13] effective April 1, 2010, two modifiers were updated to distinguish between *voluntary* and *required* use of liability notices.

- Modifier GA is now defined as "Waiver of Liability Statement Issued as Required by Payer Policy". It applies when you believe Medicare will consider a service not medically necessary in a particular situation. Ask the patient to sign an ABN and submit your claim with modifier GA, allowing the payer to decide if the service is covered.
- Modifier GX is defined as "Notice of Liability Issued, Voluntary Under Payer Policy". It applies when a service is always noncovered; it addresses the fact that most beneficiaries will elect Option 1 in the hope that Medicare might pay, despite your assurances to the contrary. Therefore, if the patient selects Option 1, append modifiers GX and GY to that claim to obtain a denial.
- Modifier GY is defined as "Item or service statutorily excluded or does not meet the definition of any Medicare benefit".

Note that Medicare Advantage plans (Medicare Part C) are prohibited from using the regular Medicare ABN form but may still require prior financial notice. In many cases, they are required to provide a coverage or non-coverage determination in advance. Check plan websites for appropriate instructions.

For non-Medicare beneficiaries, some of the principles outlined above are just as applicable. While the concept of waiver of liability may not be present, or at least not as vigorously, it is still prudent to ensure that patients appreciate the distinction between covered and non-covered services, and accept financial responsibility for the latter.

Prohibited Code Combinations

In 1996, CMS developed the National Correct Coding Initiative (NCCI)[14] to control

[12] CMS. Medicare Learning Network, MLN Matters MM6136. Revised Form CMS-R-131 Advance Beneficiary Notice of Noncoverage. Link here. Accessed 08/28/17.

[13] CMS. Transmittal R1921CP. Billing for Services Related to Voluntary Uses of Advanced Beneficiary Notices of Noncoverage (ABNs). February 19, 2010. Link here. Accessed 08/28/17.

improper coding leading to inappropriate payments in Part B claims.[15] NCCI consists of a series of edits to analyze codes reported on claims for reimbursement. They ensure the most comprehensive groups of codes are billed rather than the component parts; this is the concept informally known as "bundles". Additionally, the edits check for mutually exclusive code pairs – procedures that are medically incompatible – so just one of the pair may be reimbursed. New edits are published quarterly by the National Technical Information Service (NTIS). Some carriers have also published local policies with additional limitations. Of note, you may not use an ABN to circumvent the NCCI edits.

A bundle means that just one service will be reimbursed when both are performed on the same day. Current NCCI edits for 92025 include corneal surgery codes 65760, 65765, 65767, 65771, and the technician exam (99211).

Purchased Diagnostic Tests / Anti-Markup Rule

If you order and bill for a test and either the technical component or the professional interpretation is performed by another physician, you may be prohibited from marking up the test (*i.e.*, receiving payment from Medicare in excess of the amount you paid to the physician who performed the technical component or professional interpretation) unless the physician who performs the test "shares a practice" with you.[16] However, if the performing physician meets the Medicare criteria for "sharing a practice" with you, the prohibition would not apply for that diagnostic test. The prohibition against marking up the test is referred to as the Medicare Anti-Markup Rule and was formerly known as the Purchased Diagnostic Test Rule.

If the Medicare Anti-Markup Rule applies because the performing physician is not deemed to share a practice with the billing physician, the payment to the billing physician (less the applicable deductibles and coinsurance paid by the beneficiary or on behalf of the beneficiary) for the technical component or the professional component of the diagnostic test may not exceed the lowest of the following amounts:

- The performing supplier's net charge to the billing physician or other supplier;
- The billing physician or other supplier's actual charge; or
- The fee schedule amount for the test that would be allowed if the performing supplier billed directly.

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[14] Centers for Medicare & Medicaid Services. National Correct Coding Initiative Edits. Link here. Access 08/28/17.

[15] Medicare Claims Processing Manual, Chapter 23, §20.9. Correct Coding Initiative. Link here. Accessed 08/28/17.

[16] CMS. Medicare Learning Network, MLN Matters MM6371, July 1, 2009. Link here. Accessed 08/28/17.

For further information about the Medicare Anti-Markup Rule and the "sharing a practice" criteria, please refer to CMS instructions.[17]

Health Professional Shortage Area (HPSA)

Medicare pays a quarterly 10% premium to physicians who provide services in a Health Professional Shortage Area (HPSA). Historically, modifiers QU (urban) and QB (rural) designated services eligible for a HPSA bonus. Modifier AQ replaced these modifiers on January 1, 2006; the distinction between rural and urban HPSAs no longer exists. No modifier is necessary if your zip code is listed as HPSA eligible. The bonus payment will be automatic. Eligible services provided at locations not listed will continue to need the modifier AQ.

This premium is pertinent only to professional services, and does not apply to the technical component (TC) of diagnostic tests. There is no need to separate the professional and technical components in order to receive bonuses; the MAC will automatically calculate bonus payments on the professional component.

As an illustration, if the CT test in the Sample Claim, above, had been performed in a HPSA not receiving automatic bonus payments, then the claim would be billed as shown.

17 REFERRING/ORDERING PROVIDER	17a.		
DK J Emdy MD	17b.	NPI	1234567890
19 ADDITIONAL CLAIM INFORMATION			
21 DIAGNOSIS OR NATURE OF ILLNESS OR INJURY ICD Ind. 0			
A. H18.623 B. H52.213 C. D.			

24. A. DATES OF SERVICE From MM DD YY	To MM DD YY	B. POS	C. EMG	D. PROCEDURES, SVCS CPT/HCPCS	MODIFIER	E. DX POINTER	F. $ CHARGES	G. UNITS	H. EPSDT	I. ID QUAL.	J. RENDERING PROVIDER I.D.
mm dd yyyy		11		9xxxx	AQ	A, B	xxx xx	1		NPI	1234567890
mm dd yyyy		11		92025	AQ	A, B	xxx xx	1		NPI	1234567890

UTILIZATION

Commercial utilization rates are not readily available for these services, but CMS publishes utilization data. The most current data available comes from Medicare fee-for-service claims adjudicated in 2016.

[17] Medicare Claims Processing Manual, Chapter 1, Section 30.2.9. Link here. Accessed 08/28/17.

Medicare utilization rates for claims paid in 2016 show that corneal topography (92025) was associated with 0.8% of all office visits by ophthalmologists. That is, for every 1,000 exams performed on Medicare beneficiaries, Medicare paid for this service 8 times. For optometrists, the utilization rate is 0.3%. No reliable paid claims data exists for 0341T.

If your utilization rate significantly exceeds expected norms, as would be the case in a cornea-focused practice, you will likely garner (unwanted) attention from Medicare and other payers. Careful attention to documentation and the reasons tests were performed are your best defense against reproach in the event of postpayment review. Having original or electronic copies of other documents (such as ABNs) available is also important if there are questions about whether patients were informed of possible noncoverage.

PAYMENT RATES

National Medicare payment rate in 2017 for code 92025 is shown below, including the technical component (TC), the professional component (PC) and the global total. Note that actual payment amounts vary geographically according to local wage indices. MPPS reductions apply when multiple tests are performed on the same day.

Table 3 **Medicare National Allowable Rates**

Code	PAR	Non-PAR	Limiting Charge [18]
92025	$38.40	$36.48	$41.95
92025-TC	$17.94	$17.05	$19.60
92025-26	$20.46	$19.43	$22.35

CPT 0341T is a Category III code and no national Medicare payment rate is established. It is typically noncovered in any case.

[18] Participating physicians (PAR) agree to accept Medicare allowed amounts on all covered services as their maximum payment from all sources. This is known as "accepting assignment". Non-participating physicians (Non-PAR) may accept assignment on a case-by-case basis, but are also limited in the amount they may charge the patient if they do not accept assignment. For additional discussion, see information published by CMS for patients here. Accessed 08/28/17.

CONCLUSION

The Atlas 9000 Corneal Topography System provides eye providers with a versatile tool to perform corneal curvature, contact lens analysis, corneal wavefront, and pupillometry. Discrete reimbursement for medically necessary testing is available for corneal topography (CT) and is unlikely for pupillometry (0341T). Corneal wavefront analysis and contact lens analyses are incidental to the CT or to the contact lens service and are not separately billable. Where a test is not covered, a financial waiver, such as an ABN, is necessary to ensure that the patient accepts financial responsibility. See additional practice management tips below.

This discussion is meant to assist the reader to better understand the rules and regulations regarding reimbursement for these procedures, however the responsibility for appropriate usage, adequate documentation and proper coding are always the physician's.

Practice Management Tips

- Document the physician's interpretation of the diagnostic test within a short time, preferably within 24 - 72 hours. Be sure to address the quality of the test, the findings, and the assessment. Sign and date the note.
- Place a note in the medical record that identifies where digital images are electronically stored.
- Monitor NCCI edits.
- Reimbursement for CT is subject to Medicare's MPPR rules. When performed with other tests on the same day, payment may be reduced. Pupillometry is not subject to MPPR, but it is usually noncovered.
- If either test (92025 or 0341T) is noncovered, or has coverage but the patient's diagnosis is not in the covered indication list, the service will be patient-pay.
- If you use an independent contractor to perform diagnostic tests - that is, someone who provides all the equipment and technician and is not an employee, then get assistance with the arcane instructions associated with Medicare's anti-markup rules.